Profile of the British Columbia High Technology Sector

2001 Edition

A joint project of BC Stats and the
Ministry of Competition, Science and Enterprise

BRITISH COLUMBIA

BC STATS

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The British Columbia
High Technology Sector

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and the

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1 Highlights

High tech continues to outperform BC economy

By most measures, the high technology sector in BC grew in 1999 and 2000 at rates higher than the BC economy as a whole.

High tech GDP up 16.5% to $3.7 billion...

In 2000, constant dollar GDP generated by the high technology sector was $3.7 billion, up 16.5% from 1999. Despite the strong growth, BC still lagged behind the national growth rate (+20.9%) for high tech GDP.

...outpacing overall BC growth

The BC economy expanded 3.5% in 2000 to $95.2 billion[1].

In 2000 the high tech sector generated 3.9% of the province's GDP.

Current dollar GDP up 17.0%

Including the impacts of inflation, GDP generated by the high tech sector rose 17.0% to $3.8 billion. High tech GDP has grown in every year since 1985.

Employment up 16% to 60,890

High tech sector employment jumped 16.2% to 60,890 in 2000. Employment in all industries[2] grew only 4.1% (to 1,515,980).

$2.8 billion in wages & salaries

In 2000, workers in the high tech sector earned $2.8 billion, an increase of 18.6% over 1999. More than half ($1.6 billion) was in the computer service and engineering service industries.

Almost 7,800 high tech establishments

There were 7,786 establishments with employees in the industries of the high tech sector in 2000, up by 437 from 1999. Computer services are the largest single industry in the sector, with 2,702 establishments.

High tech exports: $946.8 million

Exports of high tech commodities from BC reached $946.8 million in 2000, up 15.7% from 1999. This was the eighth year in the last ten where there was an increase in high tech exports.

High tech imports rose 16%

High tech commodities destined for BC rose 15.9% to $3.5 billion in 2000. This was just under four times the value of high tech commodities that were exported, resulting in a trade deficit in high tech commodities.

[1] GDP at factor cost.
[2] Excluding self-employed workers, and workers in commercial fishing and agriculture.

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2 Introduction

The BC high technology sector

This Profile of the High Technology Sector is part of an ongoing project to monitor the growth and evolution of the high technology sector in British Columbia. The technological advancements of humanity in the last two hundred years (or even the last twenty years) have dramatically altered almost every aspect of the world economy and culture. The role of technology in the economy is clearly a vital area for study. This publication advances that study by evaluating the economic contribution of firms that produce high technology goods and services in British Columbia. This covers the GDP, revenue, employment, exports, etc. generated by firms in selected high technology industries.

The designation of a high technology sector among the other industrial sectors of the economy provides a very useful analytic tool. This is based on the premise that high technology firms behave in a way that allows them to be understood as a group, and that programs or policies can be tailored to their needs.

The sector definition is changing

Since the inception of the Profile reports in 1996, the statistics on the high technology sector have been built up from information about sub-industries, mostly obtained from Statistics Canada. These sub-industries, such as Aircraft Manufacturing or Offices of Engineers are categories developed and maintained by Statistics Canada. The categories can become out of date, and are revised approximately every ten years. The data collection system is then converted to the new categories, a process that takes several years.

The latest system of categories (NAICS – the North American Industry Classification System) was developed in 1997. BC Stats has determined that by next year there will be enough information on the new base to both allow and require conversion of the Profile to it. NAICS may allow for a more precise definition of the high technology sector. The BC Stats web site offers a discussion paper on which NAICS categories should be included. The site will also contain NAICS based update statistics over the course of the year.

The table following shows the sector components that have been used in constructing the current report. This is based on the Standard Industrial Classification (SIC), which is the system that preceded NAICS.

The table lists the industries that are defined, for the purpose of the present report, to constitute the high technology sector in British Columbia. Where the weight column indicates a "✓", 100% of the industry is included in the high technology sector. In those cases where numbers are given, only the indicated percentage of the industry meets the definition of high technology.

More information on this definition and the weighting is available in the 1995 paper *Defining the High Technology / Knowledge Sector in British Columbia.*[1]

Industries[2] in the High Technology Sector

SIC	Industry	Sector	Weight
3211	Aircraft and Aircraft Parts Industry	Manufacturing	✓
3351	Telecommunications Equipment Industry	Manufacturing	✓
3352	Electronic Parts and Components	Manufacturing	✓
3359	Other Communication and Electronic Equipment	Manufacturing	✓
3361	Electronic Computing and Peripheral Equipment	Manufacturing	✓
3362	Electronic Office, Store and Business Machines	Manufacturing	✓
3369	Other Office, Stores and Business Machines	Manufacturing	✓
3372	Electrical Switchgear and Protective Equipment	Manufacturing	✓
3379	Other Electrical Industrial Equipment Industries	Manufacturing	✓
3741	Pharmaceutical and Medicine Industries	Manufacturing	✓
3911	Indicating, Recording and Controlling Instruments	Manufacturing	✓
3912	Other Instruments and Related Products	Manufacturing	✓
772	Computer and Related Services	Services	✓
7752	Offices of Engineers	Services	✓
7759	Other Scientific and Technical Services	Services	✓
868	Health and Other Medical Laboratories	Services	✓
3192	Construction, Mining Machinery and Materials Handling	Manufacturing	13
3194	Turbine and Mechanical Power Transmission Equipment	Manufacturing	6
3199	Other Machinery and Equipment Industries N.E.C.*	Manufacturing	3
3271	Shipbuilding and Repair Industry	Manufacturing	11
3381	Communications and Energy Wire and Cable Industry	Manufacturing	41
3711	Industrial Inorganic Chemical Industries N.E.C.*	Manufacturing	10
3994	Musical Instrument and Sound Recording	Manufacturing	11
3999	Other Manufactured Products Industries	Manufacturing	6

* N.E.C. denotes Not Elsewhere Classified

Changes to this edition of the report

This report maintains and updates all the features of the 2000 edition. There are also new tables giving a breakdown of high tech GDP and employment for selected provinces and Canada as a whole. In addition, there have been some improvements to the methodology for measuring high technology revenue and employment that yields a more reliable estimate.

[1] Available from BC Stats at http://www.bcstats.gov.bc.ca/DATA/BUS_STAT/hi_tech/ht_def.pdf

[2] For the purposes of this report, SIC industries 3741 and 3711 are grouped together as "37grp", and 3271, 3381, and 3994 combine to form "3grp".

The report continues to include the latest information available at the time of publication for each of the variables covered. In most cases the data refer to the calendar year 2000. However, some information extends only to 1998 or 1999 as indicated below:

Data availability

Variable/Year	1998	1999	2000
GDP	✓	✓	
Employment	✓	✓	✓
Wages & salaries	✓	✓	✓
Revenues – Manufacturing	✓	✓	
Revenues – Services	✓		
Establishments	✓	✓	✓
Exports & imports (goods)	✓	✓	✓
Exports (services)	✓		

Readers should note that graphs and text in this publication only deal with the highlights of the information that has been collected. The data tables in the final sections contain additional detail that can prove valuable. These tables extend from 1990. Data extending back as far as 1984 is available for some of the data series by special request.

"Input Indicators of the BC High Technology Sector, 2001"

In addition to updating and developing this "Profile", BC Stats has developed other measures of the high technology sector. The high technology sector and the infrastructure network that surrounds it is a complex system with many players and interactions. The "Indicators" report provides measures of the inputs to the high technology sector and the overall climate of innovation. It covers thirty-one separate types of activity with respect to high technology in the educational, business, government, external, and labour sectors for the years since 1990. Whenever possible, the indicators are presented in comparison to other provinces, which serve as benchmarks for the situation in our own province.

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3 Profile and Trends I
The High Technology Sector's Contribution to the BC Economy

Two types of industries

Throughout this report, two types of industries within the high tech sector are discussed. These are service and manufacturing industries.

The high tech service industries–computer services, engineering, scientific and technical, and medical laboratories–do not make a tangible good. Instead they provide expertise, such as software creation, information technology system management, the planning and design of a bridge, or the analysis of a blood sample for a medical diagnosis.

The manufacturing industries are those that take raw materials, or the products made by other manufacturing industries, and make new products. High technology firms include aircraft construction (which includes aerospace manufacturing), assorted electronic manufacturing, and pharmaceutical manufacturing.

The place of the high technology sector in the BC economy

In terms of growth, the high technology sector has outpaced the BC economy as a whole.

BC's high technology sector has exhibited strong growth over the past decade and a half, and by every measure that growth has outpaced the provincial economy as a whole. Despite this rapid growth, the sector remains a small part of the whole economy. By 2000, the high technology sector accounted for roughly four per cent of provincial GDP and employment, and five per cent of wages and salaries and establishments. While this proportion may seem relatively insubstantial, it is important to remember that BC is maturing into a diverse economy where no single industry dominates economic activity. Sectors of similar size to the high technology sector include the mining and related industries and communication services. The financial, insurance and real estate sector[1] generates the greatest contribution, with just over 9% of total GDP.

The general structure of BC's high technology sector

The high technology sector in BC is made up of many individual industries that can be categorised as either a manufacturing or a service-providing industry. Service industries dominate every measure of high technology, from GDP to employment. By the measures presented in this report, these industries account for between two-thirds and three-quarters of the sector.

[1] Excluding owner-occupied dwellings.

Constant dollar GDP

GDP is a measure of value added, which is essentially the difference between the cost of the material inputs used to create a product or service and the price at which it is sold. Therefore, GDP includes wages and profits, which makes it an excellent measure of the contribution of an industry to the total value of production in the economy.

Two ways of reporting GDP are in current and constant dollars. Constant dollar GDP is the most commonly used measure.

The "constant dollar" expression means that the GDP values have been corrected for the impact of price changes (i.e., inflation and deflation). Reporting data in constant dollars is one way of showing the change in the output of an industry. For example, if a high technology manufacturing firm sells the same number of widgets from one year to the next, the outputs have not increased and thus, all else being equal, the **constant** dollar GDP would not change. But if that firm charged an extra 2% for each widget sold in the second year, its **current** dollar GDP would increase by 2%.

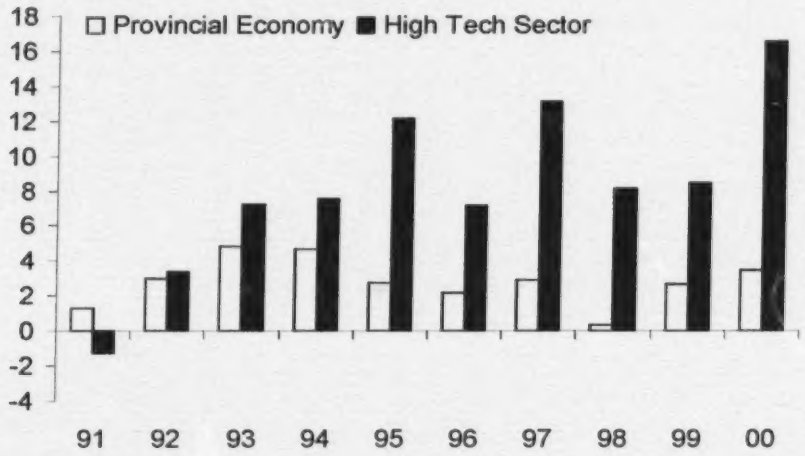
Thus constant dollar GDP tells us the real change in output. This is why constant dollar GDP is sometimes referred to as "real GDP."

High technology sector GDP outpaces rest of economy

High technology sector GDP climbed to $3.7 billion (in 1992 constant dollars) in 2000, growing 16.5% over the previous year. It was the ninth straight year that the rate of growth of GDP in the high tech sector exceeded that of the BC economy overall. The overall BC GDP[2] growth was 3.5% in 2000, which is slightly higher than the ten-year annual average growth rate of 3.0%.[3] By comparison, the annual average rate of growth of the high tech sector GDP in BC over the last ten years was 9.2%. High technology now accounts for 3.9% of BC's GDP, up from 2.3% in 1991.

High technology GDP growth outpaces BC economy again

% change from previous year



[2] All GDP figures quoted in this report are at factor cost.
[3] Compound rate.

Although the service industries dominate the high technology sector in terms of size, it has been the manufacturers that have recorded the higher percentage GDP growth in the last decade. The manufacturing industries have logged an average GDP growth rate of 15.1% over the last ten years, which is almost double the 7.8% growth rate for high technology service industries over the same period. Consequently, the manufacturing industries have increased their share of high tech GDP from 15.6% in 1991 to 25.0% in 2000. In 2000, both manufacturing (+15.9%) and services (+16.7%) high technology GDP experienced high growth rates.

BC GDP (constant 1992 dollars), 2000

	$ million	% change
High technology manufacturing	925.9	15.9
High technology services	2,782.2	16.7
High technology sector: total	**3,708.2**	**16.5**
BC total	**95,185.9**	**3.5**

It is impossible to say that high technology is the fastest growing sector in the economy due to the variety of definitions of "sectors," but it can safely be said that the high technology sector has been close to the top in GDP growth for most of the decade.

Although a couple of sectors of the economy outperformed high technology industries in terms of GDP growth in 1999[4] (specifically, forestry and related manufacturing, which grew 14.6% and Communication services, which grew 14.4%), in general, high tech GDP growth was stronger than most other major activities in the provincial economy. Overall, the goods producing industries (including primary industries) were up 3.4%, while the service industries increased 2.4%.

From 1990 to 1999, the high technology sector had annual average growth of 7.2% while the total BC economy grew 2.7% per year. Through this period, the next fastest growing major economic activity was communication services (+4.8% annual average).

BC's constant dollar GDP growth lags behind national rate

Despite posting an impressive growth rate of 16.5% in 2000, BC's high technology GDP growth was still less than the national rate. Canadian high tech GDP, in constant dollars, grew 20.9% to $48.6 billion. Both Ontario and Quebec recorded growth rates in excess of 20% in 2000, growing 23.0% and 21.3% respectively. At $25.4 billion, Ontario was responsible for over half the Canadian high technology GDP. Alberta's high tech sector also boasted double-digit growth in 2000 (+15.7%), rebounding from a relatively low growth year in 1999 (+3.8%), its lowest since an 8.3% decline in 1992.

[4] Data for 2000 is not available at these finer breakouts.

Despite a 16.5% increase in 2000, BC's GDP growth lags behind the national average.

High Tech GDP (constant 1992 dollars), 2000

	$ million	% change
British Columbia	3,708	16.5
Alberta	3,928	15.7
Ontario	25,441	23.0
Quebec	12,685	21.3
Canada	**48,589**	**20.9**

While in BC the growth was split fairly evenly between manufacturing and services industries, this was not the case for all provinces. In Ontario and Quebec, growth in manufacturing (+30.4% for Ontario and +28.5% for Quebec) significantly outpaced growth in services (+15.7% in Ontario and +9.1% in Quebec). For Ontario, this was a complete reversal of the last four years where growth in services had outpaced manufacturing. In Alberta, the trend of the last few years continued and the high tech service sector (+16.9%) grew at a much faster rate than the manufacturing sector (+9.4%). In just five years the service sector has increased its share of high tech GDP in Alberta from 75% to 85%.

Current dollar GDP

Like its constant dollar counterpart, current dollar GDP is a measure of value added, which is essentially the difference between the cost of the material inputs and services used to create a product or service, and the price at which it is sold. The difference is that current dollar GDP leaves in the impact of inflation. During periods of rapid price change, which some high technology industries have experienced, price effects can mask changes in the volume of output. However, current dollar GDP has the advantage of showing the buying and investing power of incomes in the industry.

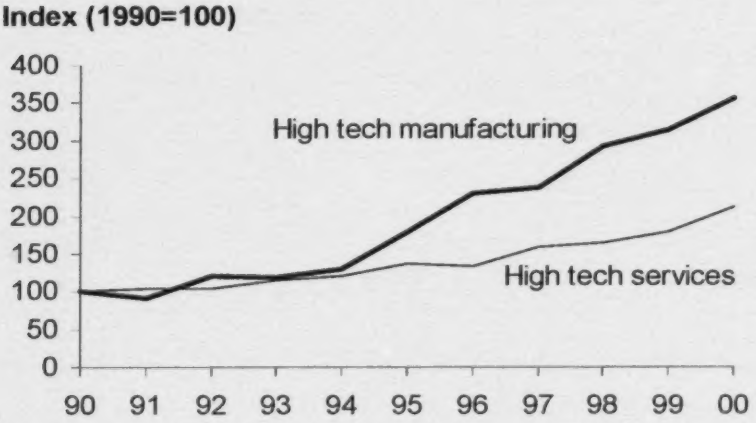
Current dollar GDP continues to rise

High tech GDP (current dollars) has been on the rise since 1985.

High technology GDP measured in current dollars rose 17.0% in 2000, to just over $3.8 billion. By comparison, the overall BC GDP grew by 6.7%. The high technology sector has outperformed the overall BC economy in each of the last six years when viewed with the impact of inflation included (i.e., in current dollars). The high technology sector's current dollar GDP has increased every year since 1985.

The service sector posted the strongest growth, rising 18.1% to $2.8 billion. The manufacturing industries also experienced a substantial increase, jumping 13.9% to just over a billion dollars. Over the long-term, output from the manufacturing industries has been growing at a much faster rate compared to the service sector. High tech GDP for service industries doubled from 1990 to 2000, but for the manufacturing industries, it is three and a half times higher. As a result, the manufacturing sector has increased its share of total high tech GDP from less than 18% in 1990 to over 26% in 2000.

Manufacturing gaining share of high tech GDP



In the service sector, most of the growth over the last decade has been due to a threefold increase in the GDP of computer services from $324 million in 1990 to over $1 billion in 1999.[5] By contrast, the output of the next largest service sector industry, engineering services, increased only 4% from 1990 to 1999, and consequently its share of the service sector GDP dropped from 54% to 31%. The GDP of scientific and technical services more than doubled over the same period and medical and other health laboratories increased by almost 60%, leaving engineering services as the only industry that did not record exceptional growth in output.

Engineering services GDP has remained stagnant while computer services GDP has soared in the last decade.

BC current dollar GDP grows slower than national rate

In 2000, the Canadian high technology sector's GDP was 22.0% higher than it was in 1999, climbing to almost $50 billion. Quebec (+24.8%), Ontario (+22.7%) and Alberta (+18.5%) all surpassed British Columbia's 17.0% growth rate. Alberta's high growth was a significant rebound from 1999, when its high technology sector GDP was almost stagnant, growing only 0.7%, the lowest growth recorded in that province since a 5.3% decline in 1992.

There were significant disparities in growth rates for service and manufacturing industries. In Ontario, the manufacturing sector (+25.7%) outpaced services (+20.1%), but in Quebec the difference was even more significant. Manufacturing high tech GDP growth (+30.9%) was triple that of services (+10.4%). In Alberta, the opposite was true. Growth in services (+20.8%) was almost triple the rate of growth in high tech manufacturing (+7.8%).

[5] Data for 2000 is not available at these finer breakouts.

Price changes: comparing current and constant dollar GDP

Comparing the constant and current dollar measures reveals the degree of price change of both the outputs and inputs in an industry. In the high tech sector this is particularly important, since some industries have experienced price deflation in recent years as rapid change in technology drives prices down (for example, personal computers).

Inflation in the high tech sector was low in 2000

The growth rate of current dollar high tech GDP was only slightly higher than that of the constant dollar figure, which indicates that for the sector as a whole there was very little inflation. However, this masks the fact that price increases in some industries were offset by declines in others. For instance, the service industries experienced some inflationary pressure, while the manufacturing sector actually encountered price declines overall.

Employment in the high tech sector

This measure of employment is based on Statistics Canada's Survey of Employment, Payroll and Hours (SEPH). This employer survey provides a wealth of detail about employment, wages, and hours in a large number of industries. However, because it is an employer survey, the SEPH data does not include self-employed workers, and workers in both commercial fishing and agriculture.

The data from SEPH give the average number of workers in an industry through the course of the year. If an industry is highly seasonal, the peak number of workers is offset by those months where there are fewer workers. A full-time worker is accorded equal status with a part-time worker; no attempt is made to measure the number of "person years" or "full time equivalents."

High technology employment continues to grow

High tech sector employment eclipsed 60,000 for the first time in 2000.

In every year in the last decade, employment in the high technology sector in BC exceeded that of the previous year. The year 2000 was no exception as employment grew substantially to 60,890 workers, up 16.2% from 1999. This compares to 4.1% growth for employment in all sectors in the province.[6] The high technology sector in BC gained approximately 8,500 jobs in 2000, accounting for about 14% of total employment growth in the province.

Employment, 2000

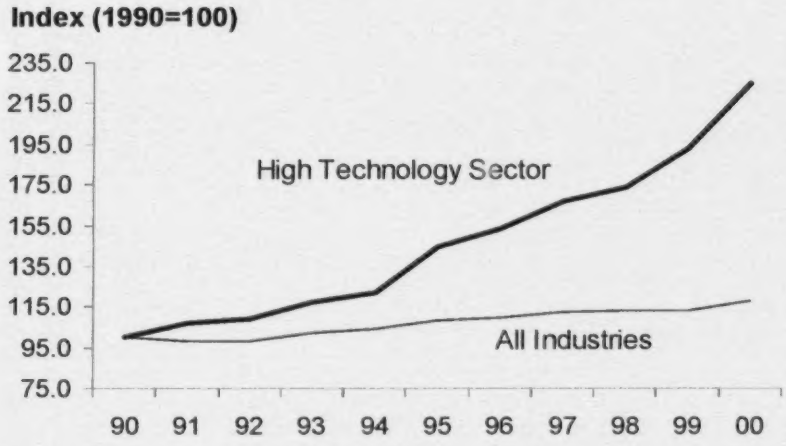
	Workers	% change
High technology manufacturing	14,290	15.7
High technology services	46,600	16.4
High technology sector: total	**60,890**	**16.2**
BC total	**1,515,980**	**4.1**

[6] This growth rate is based on Statistics Canada's Survey of Employment, Payroll and Hours. The more frequently cited Labour Force Survey (which includes self-employed workers, as well as workers in commercial fishing and agriculture) reports that for 2000, employment in BC grew only 2.2%.

High tech employment growth outpaced the expansion of overall employment in each year in the last decade. This long run of growth has more than doubled the number of workers in the high technology sector over the last ten years. The sector's growth is all the more impressive when compared to overall employment growth in BC over the same period, which has increased only 20%. The strength of the high technology sector expansion has increased its share of provincial employment from 2.1% in 1990 to 4.0% in 2000.

High tech's share of total employment has almost doubled since 1990.

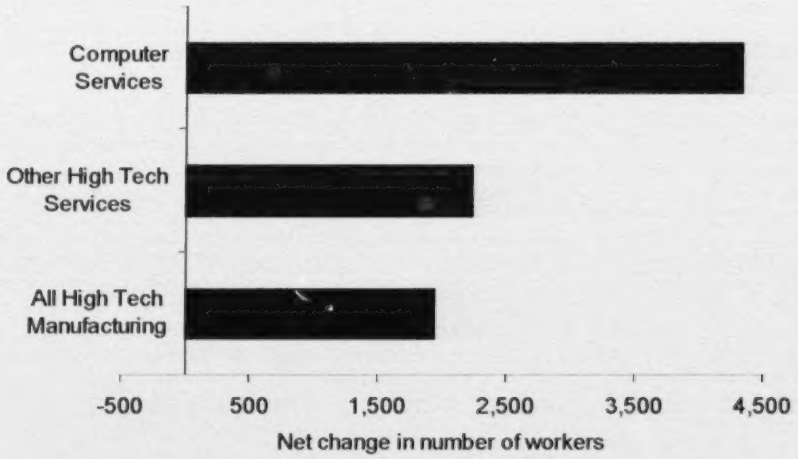
High technology employment grew faster than total employment in every year in the last decade



The service industries were responsible for about three-quarters of the growth in high technology employment in 2000. Once again, computer services led the way adding 4,330 employees, bringing the total to 20,910. This is more than all the high tech manufacturing industries combined (14,290 employees). Since 1995, the number of employees in computer services has more than doubled, accounting for over half the employment growth in the high technology sector as a whole.

Computer services account for about a third of all high tech employment.

Computer services dominate high tech job creation in 2000



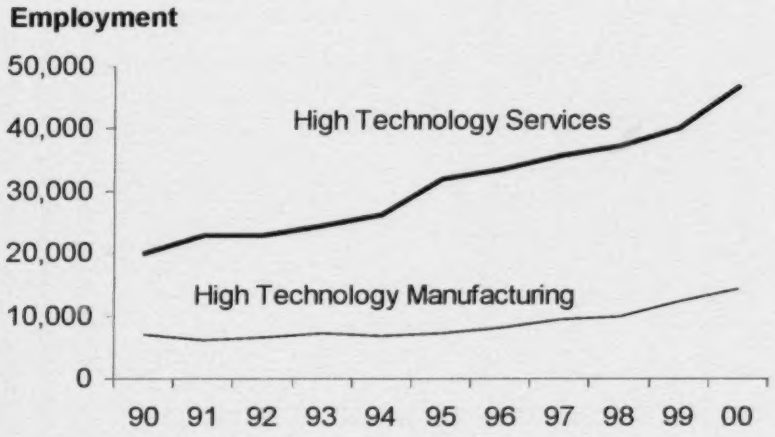
Employment in the engineering and scientific and technical services industries rebounded in 2000 after declining in 1999. These two industries together comprise more than a third of all high technology employment.

Communication equipment manufacturing represents about 40% of all high tech manufacturing jobs.

Within the manufacturing sector, the largest high technology employer is the communication and other electronic equipment manufacturing industry. This industry employed 5,670 people in 2000, almost 40% of all high tech manufacturing employment. The fastest growing industry in 2000 was office, store and business machine manufacturing, which posted 48.8% growth to climb to 2,430 employees.

Job creation in high technology manufacturing industries dwarfed that of the manufacturing sector as a whole in 2000, rising 15.7% compared to only 5.8% for all manufacturing. Despite a doubling of the amount of people working in high tech manufacturing industries over the last decade, the service industries still dominate total employment in high technology.

High tech manufacturing is still a small part of the sector's employment despite strong growth



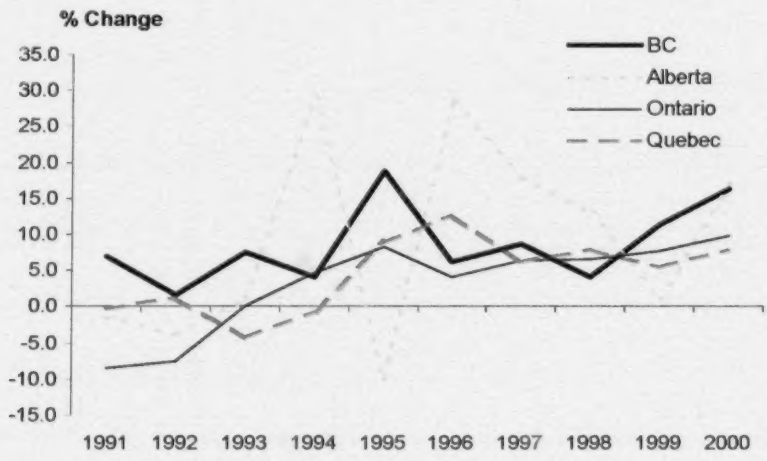
High technology employment strongest in Western Canada

British Columbia (+16.2%) and Alberta (+17.0%) experienced substantial employment growth in their respective high technology sectors in 2000. By comparison, the Canadian aggregate growth was only 10.5%. Since 1990, both BC and Alberta have increased their share of high tech employment in Canada from about 7.5% to around 11% in 2000. For Alberta, this share is commensurate with its share of total Canadian employment, while for BC, it is significantly lower than the 12.5% share of overall employment both within and outside the high technology sector.

Most of the gains in the high technology sector have come at the expense of Ontario, which has seen its share of the Canada total drop from 52% in 1990 to under 46% in 2000. This is despite an annual average growth rate of 4.3% over the last decade. The reason is that BC high tech employment has been growing at an annual rate of 8.6% and employment in Alberta has been growing at an even faster rate of 9.6%. The overall Canadian annual average rate over the last ten years is 5.4%. Of Canada's four largest provinces, only BC has had a positive growth rate in high tech employment in every year in the last decade.

High tech employment growth is most volatile in Alberta

BC's high tech employment grew steadily throughout the nineties, while other provinces experienced temporary declines.



Measuring productivity changes: comparing real GDP growth with employment changes

Examining the difference between constant dollar GDP growth (i.e., real changes in output) and employment gives an indication of changes in labour productivity. If real GDP growth is outpacing increases in employment, this shows that individual workers are producing more and that capital is being used more efficiently. However, what these data do not show are the extent to which the changes in productivity may be due to changes in capital or in the hours of work.

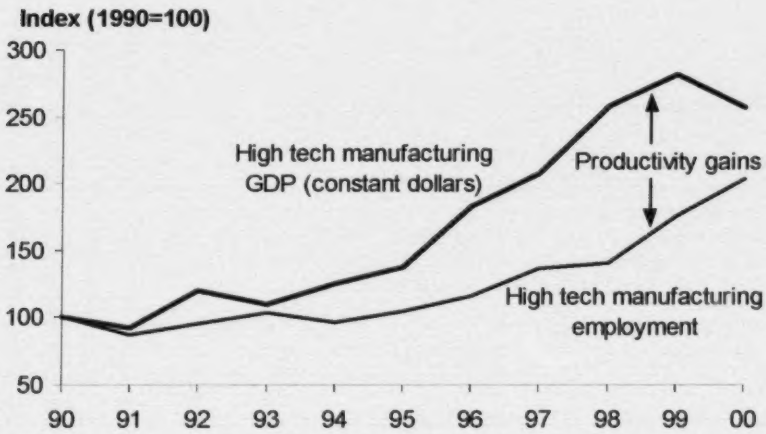
Productivity on the rise

Substantial productivity growth has been achieved in high tech manufacturing during the '90s.

From 1990 to 2000, real GDP in high technology manufacturing more than tripled, while employment only doubled. This indicates that high technology manufacturing industries have managed to substantially increase their output per worker over the last decade. In other words, high technology manufacturing industries have significantly improved their productivity since 1990.

Advances in productivity can originate in a number of areas. The capital used to produce the goods can be used more intensely, and labour can be used more efficiently. In British Columbia, many high technology manufacturing establishments have begun to mature, moving from a product development phase (when few goods for market are being produced) to full-scale production. Over time, we might expect to see productivity gains level off as the high technology manufacturing sector begins to mature.

High tech manufacturing in BC has achieved significant gains in productivity



Unlike manufacturing, the service sector did not achieve productivity gains. High technology services employment jumped 132% from 1990 to 2000, but constant dollar GDP of services increased by only 97%. Within the service sector there were productivity gains in computer services where even though employment tripled in the ten-year period from 1990 to 1999,[7] GDP increased three and a half times. However, engineering services experienced a 21% increase in employment, but GDP dropped by 12% in the same period. The other service industries also saw productivity declines as employment growth heavily outweighed expansion in GDP.

In contrast, high tech services, with the exception of computer services, have experienced productivity declines.

How can the discrepancy between productivity in manufacturing versus services be explained? Foremost is the fact that the service industries are more labour intensive, and thus there is little potential for productivity gains to be made through a more efficient use of capital. Capital can easily displace workers when people are used to perform repetitive, mechanical tasks, but in the case of high technology services, the product being sold (such as engineering designs or software programs) is created directly from the individual intellect and knowledge of the workers.

[7] Data for 2000 is not available at these finer breakouts.

Revenue

Revenue is the amount of money earned from the sale of goods or services by producers in an industry. It is a measure of the monetary value of an industry's goods or services, and in the manufacturing sector is measured through the value of shipments.

Revenue includes the cost of the inputs necessary to make the good or service, while GDP is the amount remaining after all costs (except labour costs) have been paid.

Manufacturing revenue falls for the first time since 1993

In 1999, for the first time since 1993, revenue in the high technology manufacturing sector experienced a year-over-year decline.[8] The high technology sector earned $1.6 billion during 1999, a 9.5% drop from the previous year. The aircraft and aircraft parts industry rebounded (+34.1%) after two consecutive years of significant drops, but most manufacturing industries saw falling revenue, including the two largest, communication and other electronic equipment (-10.5%) and office, store and business machines (-28.3%).

Wages and salaries

Wages and salaries are based on the earnings of all workers in an industry who are on the payroll, from working owners and senior executives to junior support staff. While overtime and bonus pay is included, other benefits such as medical plans, stock options, and time off in lieu of overtime are not.

Like the employment values reported earlier in this report, the wages and salaries data are calculated using source data from Statistics Canada's Survey of Employment, Payroll and Hours.

High tech wages and salaries continue to rise in 2000

Workers in the high technology sector earned a total of $2.8 billion in 2000, up 18.6% from 1999. This increase was three times the rate of growth of wages and salaries in the province as a whole. The significant expansion in employment is the main driving force behind the rise in earnings, although climbing pay scales also contributed to the growth.

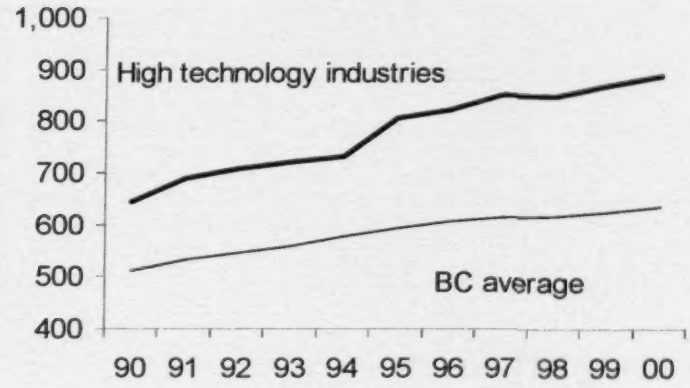
High tech workers earn more, on average, than other workers in the economy do and the gap is widening.

Average weekly earnings recorded a modest increase, rising 2.1% from 1999 figures. This is only slightly higher than the BC industrial aggregate, which moved up 1.9%. However, the level of earnings is significantly higher in the high technology sector compared to the economy as a whole. While the average weekly pay in BC was $640 per week in 2000, the average weekly earnings in the high technology sector were $890. The $250 difference represents a premium of almost 40% for high technology employees. The wage disparity is likely due to a combination of greater skill requirements relative to many jobs, plus the burgeoning demand for skilled high technology workers, which necessitates greater pay to both attract and retain them.

[8] Revenue for high technology services for 1999 is not available.

High tech industries have higher wages

Average Weekly Earnings ($)



Establishments: how many high tech businesses are there?

The high tech sector is a dynamic one, with activities in a wide range of industries. Statistics Canada's Business Register is used to count how many establishments are in each industry in the sector, how many employees they have, and where they are located.

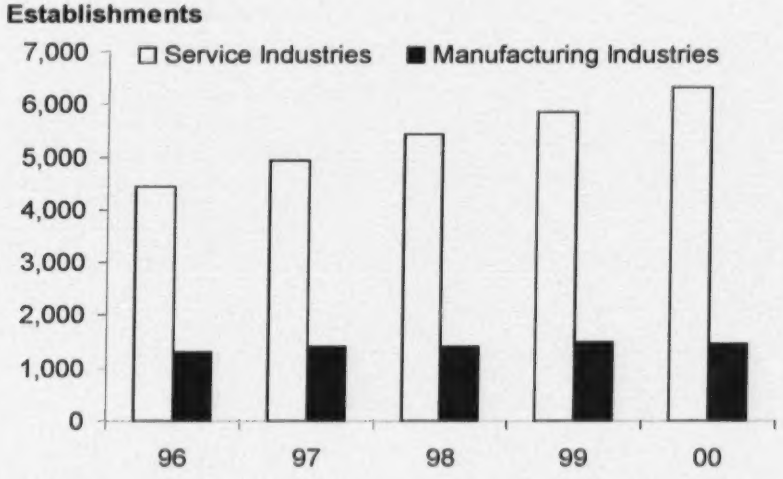
An establishment is the smallest accounting unit within a firm that can report certain financial data. A single company may contain a number of establishments. A branch location does not always signify the existence of an establishment; for example, bank branches are not identified as individual establishments. Furthermore, to be included in the tabulations the establishment must have paid employees; owner-operator firms with no paid employees are not included.

The number of high tech establishments continues to grow

Service industries dominate the count of high tech establishments.

There were more high technology establishments in BC in 2000 than ever before. Excluding those establishments with no employees, there were 7,786 high tech establishments, 5.9% more than in 1999. Eight out of every ten of these were in service industries. There were 6,323 high technology service establishments, versus only 1,463 in the manufacturing industries. In fact, three out of four of the service industries had more establishments than all of the manufacturing industries combined.

Four-fifths of high tech establishments are in service industries



Not only does the service sector dominate in terms of the number of high technology establishments, but its share is also getting larger. While the service sector added 462 establishments in 2000 (+7.9%), there were actually 25 fewer (-1.7%) in the manufacturing sector.

The computer services industry made up the bulk of the new establishments with 405 additions in 2000. The only other industry making significant gains was scientific and technical services (+167), while most other industries suffered small losses or gained less than ten establishments.

Although the largest gains were smaller establishments with 1 to 4 employees (+149), there were also significantly more establishments with 50 or more employees (+122). Most industries, including those that experienced declining numbers overall, saw growth in the number of establishments with 50 or more employees. This suggests that high technology firms are growing and, as a result, have to hire additional staff.

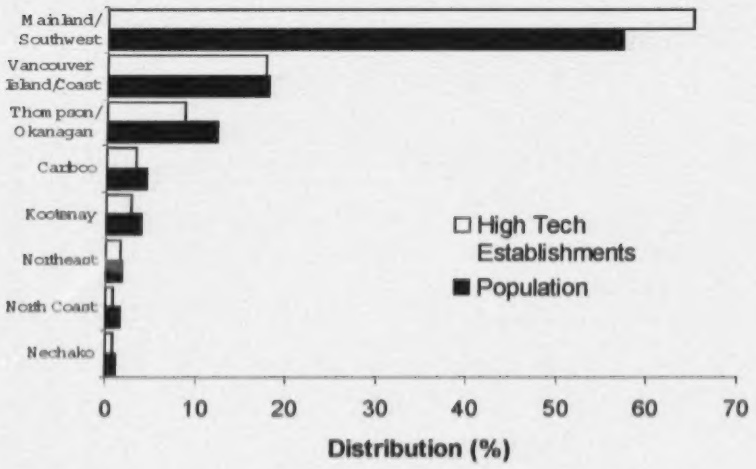
Manufacturing industries are a good example of this. Although the overall number of high tech manufacturing establishments declined by 25 in 2000, the number with 50 or more employees increased by 37. Most of the declines were establishments with 1 to 4 employees (-57).

Although establishments in the manufacturing industries are heavily outnumbered by those in the service sector, they tend to have larger numbers of employees. Just over half the manufacturing establishments employed less than five workers, while fully two-thirds of the service establishments were of this size. At the other end of the size scale, one of every five high technology manufacturing establishments had 20 or more workers, but just over one in ten of the high technology service establishments was this large.

High tech establishments are located where the people are

As one would expect, high technology establishments tend to be located in the most populous areas of the province. In 2000, almost two of every three high technology establishments (5,048) were located in the Mainland/Southwest Development Region (which includes Vancouver). Most of the remainder was found in Vancouver Island/Coast (1,363) and Thompson/Okanagan (664).

Two-thirds of high tech establishments are in the Mainland/Southwest



Most of the growth in the high technology sector has been concentrated in the Lower Mainland as well. Almost 7 out of every 10 new establishments were located in Greater Vancouver (+303). The Capital region (which includes Greater Victoria) recorded the next largest growth, adding 55 establishments in 2000. For both these regions, all the growth occurred in the service sector, while there was actually a small decline in the number of manufacturing establishments. The Peace River region added 16 high tech establishments in 2000, reflecting the robust economic growth occurring in the north-east corner of the province on the strength of the oil and gas sectors.

The location of high tech establishments mirrors the distribution of BC's population.

Self-employment

It is widely recognised that self-employment is an increasingly important factor in the BC economy. There are no particularly good measures of self-employment in the high tech sector at this point, but it is possible to arrive at a rough approximation through a tabulation of the number of establishments with no employee payroll. This approximates the number of self-employed with no employees (those with employees will be counted in the number of establishments discussed earlier). 1998 was the first full year that the number of establishments with no payroll was measured, limiting the scope of the historical data.

Note: *care must be used in interpreting these data. It would be erroneous to add these establishment counts to the total number of high technology workers reported elsewhere in this report due to the differences in what they are measuring.*

Self-employment in the high tech sector

Although the number of self-employed in British Columbia dipped in 2000 (-6.8%), there were still about 40% more self-employed in the province compared to 1991.[9] Over 17% of the BC labour force were self-employed in 2000. Some of the high technology industries, particularly computer and engineering services, are ideally suited to self-employment, where the skills, knowledge, and energy of the individual are more important than large capital investment. Labour Force Survey data bears this out, as approximately 40% of all workers in the professional, scientific and technical services were self-employed in 2000. (Due to the nature of the data source, this figure includes various high technology workers as well as other professionals such as lawyers, accountants, and architects.) By comparison, less than 8% of workers in manufacturing industries were self-employed.

There were 6,755 high technology establishments reporting no employee payroll in 2000, about 2% higher than a year earlier. (Note that these figures *cannot* be added to the employment estimates presented earlier to arrive at a "total" employment figure for the sector.)

Establishments, 2000

	Zero employees	1+ employees
High technology manufacturing	790	1,463
High technology services	5,965	6,323
computer services	*2,780*	*2,702*
engineering services	*1,734*	*1,913*
scientific and technical services	*1,409*	*1,500*
High technology sector: total	6,755	7,786

Nearly nine out of every ten of the zero employee establishments were in the high technology service industries. In each of the three largest high technology service industries—computer services, engineering services, and scientific and technical services—the number of establishments with zero employees was roughly the same as the number of establishments with payroll employees.

[9] Source: Labour Force Survey, Statistics Canada.

4 Profile and Trends II
International Trade in High Technology Goods and Services

Trade in High Technology Goods

International trade is an important aspect of the high technology sector, as reflected in the high volume of two-way trade.

The domestic market for high technology goods does not have sufficient volume to achieve the economies of scale needed to remain competitive. Therefore, access to international markets is extremely important as it allows BC producers of high technology goods to focus on market niches.

At the same time, BC manufacturers do not produce enough of some types of high technology equipment to satisfy the domestic demand and as a result, large volumes of goods are imported into the province. It is interesting to note that a major consumer of high technology imports is the high technology sector itself.

High technology goods referred to in this section are based on a list developed by the U.S. Bureau of the Census and modified by Statistics Canada to fit Canadian conditions. For more information, please see Appendix B "Defining High Technology Commodities."

Exports of high technology goods continue to grow

Exports of high tech commodities have been climbing for four straight years.

Exports of high technology commodities from British Columbia were valued at $946.8 million in 2000, up 15.7% from 1999. Exports of goods in the high technology sector outpaced growth of exports overall (+13.2%). Almost three percent of all BC exports were comprised of high technology goods.

The strong growth was due largely to two burgeoning commodity groups,[1] material design goods and opto-electronics, which leapfrogged over aerospace and computer integrated manufacturing to become, respectively, the second and third largest high technology commodity exporters in British Columbia. Computers and telecommunications equipment retained its rank at the top despite posting a decline for the second straight year. This group has slipped from having a 39% share of BC high technology exports in 1998 to only 22% in 2000.

BC high technology exports by commodity group—2000

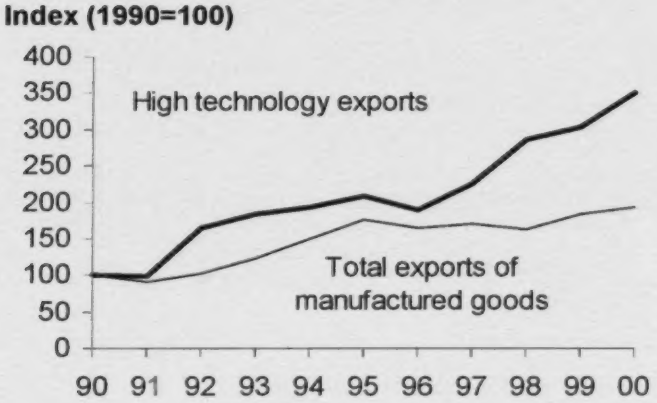
	$ million	% change
Computers and Telecommunications	212.2	-8.0
Material Design	178.6	90.0
Opto-Electronics	166.3	82.6
Computer Integrated Manufacturing	127.2	9.1
Aerospace	110.2	-14.6
Life Sciences	79.5	7.6
Electronics	65.2	-16.2
Weapons and Nuclear	6.6	149.9
Biotechnology	1.0	-57.5
Total	**946.8**	**15.7**

Over the last decade the pace of growth in high technology exports has appreciably exceeded that of exports of manufactured

[1] For information on high technology commodity groups, see Appendix B.

goods in total. Between 1991 and 2000, exports of high technology commodities have grown at an annual average rate[2] of 15.1%, well above that of total manufactured commodities (+8.7%). This high rate of growth has resulted in a 350% expansion in the value of high technology exports from BC from 1990 to 2000.

High technology goods exports have grown faster than total goods exports

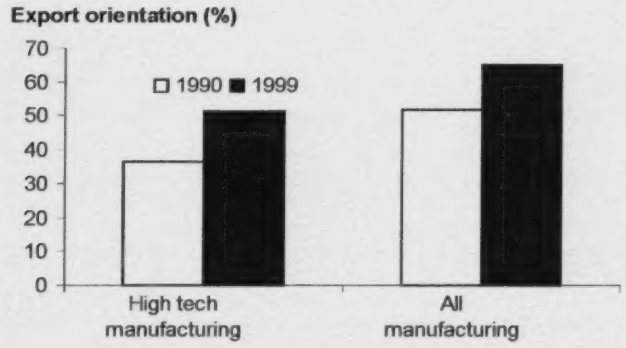


Manufacturers of high tech commodities export less of their outputs compared to other BC manufacturers.

Despite the greater rate of growth in exports of high technology goods compared to all manufactured commodities, a relatively smaller portion of their total shipments[3] are exported. Approximately 66% of all processed goods in BC were exported in 2000, compared to only 54% of high technology goods. However, the greater pace of growth of high tech exports means the gap is closing. While the percentage of all goods produced that are exported has increased substantially since 1990 (a 14 percentage point jump overall), the proportion of high technology goods that is slated for export has climbed even more (a 17 percentage point rise).

[2] Compound rate.
[3] A term used interchangeably with "revenue" elsewhere in this report.

A smaller portion of high technology products are exported compared to total manufacturing



United States is the destination of most BC high tech exports

In 2000, BC exported more than 27 times the value of high technology goods to the US than to Japan, the next most important destination for BC high technology exports.

The United States receives by far the largest share of BC exports of high technology goods, significantly higher than its share of total BC exports. In 2000, BC manufacturers of high technology commodities exported $797.7 million of their products to the United States, accounting for 84% of the total value of high technology exports. By comparison, the share of total exports of goods manufactured in BC shipped to the United States was 66%. After the US, the next most important destination for BC produced high technology commodities was Japan, with only 3% of the total value ($28.9 million).

The US led the way in export growth in 2000, with an additional $116.4 million worth of high technology goods heading south compared to 1999, which translates to a growth rate of 17.1%. The continued depreciation of Canada's dollar relative to US currency is one factor that makes BC's products attractive to American customers. Another reason for the strong growth in high technology exports to the US is the robust economic climate in that country. The US is just coming out of the longest run of peacetime economic expansion in history.

BC high technology exports by destination—2000

	$ million	% change
USA	797.7	17.1
Pacific Rim	63.7	-9.5
European Union	54.8	46.1
Rest of the world	30.6	5.7
Total	**946.8**	**15.7**

Japan rebounded as an export destination for BC products in 2000, with the value of exports to that country almost quadrupling over the 1999 figure. This impressive growth can likely be attributed to the beginning of economic recovery in Japan. Despite the

tremendous growth in exports to that country, exports to the Pacific Rim as a whole fell for the third straight year, dropping 9.5% to $63.7 million. Exports to Hong Kong and the People's Republic of China were halved, while exports to Taiwan were only a quarter of the value compared to 1999. By contrast total BC exports to both China (+24.6%) and Taiwan (+12.7%) grew substantially in 2000.

High technology exports to the European Union from BC rose 46.1% in 2000 on the strength of an extraordinary tenfold increase in exports to Italy, from $2.1 million in 1999 to $21.5 million in 2000. As a result, Italy surpassed the United Kingdom as the most important destination in the European Union for exports of BC high technology commodities. A large portion of this increase is due to a one-time contract with an Italian firm for helicopter engines, for helicopters that were being built for the Federal government of Canada. This could mean that exports in 2001 will be much lower. However, a memorandum of understanding signed recently between Canada and Italy designed to increase trade and investment between the two countries, including sectors such as Information Technology and health, may help maintain the higher export numbers.

Mode of transport

By far the majority of BC high technology exports are transported by either land or air, with only a minor percentage (3.4%) shipped by sea. The destination of the exports is a significant determinant of the mode of transport. Since the United States is the destination for the bulk of high tech exports and air transport is more expensive on average, land (i.e., rail or truck) is the most popular mode of transport (55.1%). Almost two-thirds of exports to the US travel by land, and almost all the remainder are shipped by air.

BC high technology exports by region and mode of transport—2000

Region	Mode of transport	$ millions	% of total high tech exports
United States	Land	516.8	54.6%
	Sea	1.6	0.2%
	Air	279.3	29.5%
	Total	*797.7*	*84.3%*
All other countries	Land	4.9	0.5%
	Sea	30.9	3.3%
	Air	113.3	12.0%
	Total	*149.1*	*15.7%*
Total	Land	521.7	55.1%
	Sea	32.5	3.4%
	Air	392.6	41.5%
	Total	*946.8*	*100.0%*

For all other countries excluding the US, air cargo is the most frequent mode of transport to other countries, accounting for nearly 76% of the total exports. Another 21% are shipped by sea, and 3% by land. [4]

High technology imports are also on the rise

In 2000, imports of high technology commodities to BC grew at almost the same rate as exports from BC (+15.9%). There were $3.5 billion dollars worth of high tech goods imported into BC in 2000, over three and a half times the value of that exported from the province.

As with exports, computer and telecommunication goods lead the way as the most important import, but whereas exports of these commodities fell by 8.0% in 2000, imports were 35.7% higher than in 1999 eclipsing a billion dollars for the first time in 5 years. Aerospace ranked second in imports at $0.8 billion and together with computer and telecommunication commodities, these two groups comprise over half of all high technology imports into BC.

BC high technology imports by commodity group—2000

	$ million	% change
Computers and Telecommunications	1,100.6	35.7
Aerospace	807.8	3.1
Life Sciences	690.9	0.1
Computer Integrated Manufacturing	450.1	11.6
Electronics	204.8	33.2
Material Design	109.6	68.0
Opto-Electronics	64.3	64.3
Weapons and Nuclear	58.7	3.3
Biotechnology	52.7	2.6
Total	**3,539.4**	**15.9**

The United States is the source of the majority (56.9%) of BC imports of high tech goods valued at over $2 billion in 2000. The next most significant origin of BC imports is the United Kingdom at a quarter of a billion dollars, or one eighth of that of the US. Nevertheless, the distribution of imports is much more diverse than that of exports where the US is far and away the single most important destination.

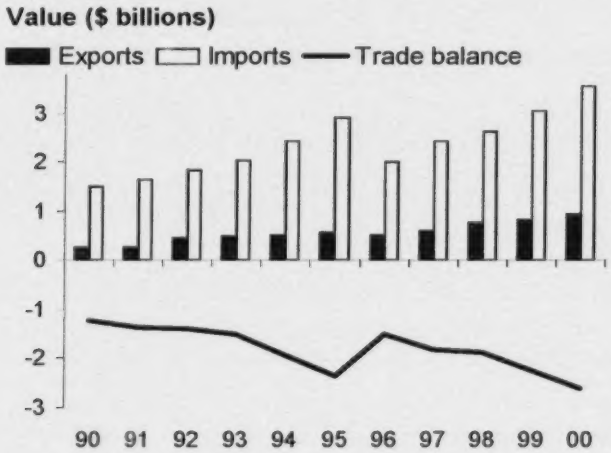
[4] The apparently implausible shipments of products by land to overseas destinations is explained by the fact that the goods may leave BC by either truck or rail to points of departure in the United States where they are loaded onto ships or planes for the remainder of their journey.

The balance of trade

BC has a trade deficit in high technology goods as imports far exceed exports.

BC's imports of high technology commodities are far greater than the value of exports, and as a result, the province runs a trade deficit in these goods. Although high tech exports have grown at a faster rate than imports over the last decade, the absolute growth in imports has exceeded that of exports, which means the trade imbalance has continued to expand.

High technology trade deficit continues to grow



BC's trade deficit in high technology commodities with the United States is more than that of the European Union and Pacific Rim countries combined.

In 2000, the trade deficit in high technology commodities grew to about $2.6 billion, an increase of almost 16% over 1999. Roughly half of BC's trade deficit in high technology commodities is with the US ($1.2 billion). The trade deficit with Pacific Rim countries grew over 41% in 2000 to $415.5 million accounting for about a third of the total increase. Although BC's trade deficit with the European Union grew more slowly (+2%), it is still significantly larger at $628.2 million.

The only high tech commodity groups for which BC has a trade surplus are opto-electronics and material design. These categories include some of the most technologically advanced goods, such as lasers, fibre-optics, superconductors, and advanced polymers. That BC exports more of these leading-edge commodities than it imports supports the contention that BC's research and development activities are a vital part of the manufacturing activities in the province.

BC balance of trade in high technology goods by commodity group—2000

	$ millions
Opto-Electronics	102.0
Material Design	69.0
Biotechnology	-51.7
Weapons and Nuclear	-52.1
Electronics	-139.6
Computer Integrated Manufacturing	-322.9
Life Sciences	-611.4
Aerospace	-697.6
Computers and Telecommunications	-888.4
Total	**-2,592.6**

Export of high technology services

Service exports are generally more difficult to measure compared to exports of goods. Some service exports take place when BC-based professionals, such as engineers or software programmers work for a period of time outside the province. Service exports also occur when, for example, an engineering firm produces a study in its BC office for an overseas client or when a software developer creates a new program which is "shipped" on-line to a client in another country.

Why are they important?

Over the last couple of decades, worldwide trade in services has increased significantly as technical innovations have widened the scope of the service sector and advances in transportation and communications have decreased the distance between countries in an economic sense. The proliferation of e-mail, the Internet, and other forms of information technology has made it easier to conduct business with clients from around the world. Moreover, decreases in the cost of travel, and an increased number of overseas offices have made it more economical—and practical—for companies to send employees overseas to conduct business.

The analysis presented here is for 1998, the most recent year for which data are available.

Service exports continue to grow

BC's high tech service industries continue to increase their share of high tech exports.

Although there are four broad groups of service industries in the high technology sector, only two of them derive a significant part of their revenues from exports. In 1998, exports of services from computer and related services and engineering services amounted to $638 million, approximately 83% of the value of all high technology goods exports. This is compared to 1991[5] when services exports were about one third the value of goods exports.

[5] The first year for which services export data is available.

BC high technology service exports—1998

	Revenues	Exports	
	$ million	$ million	% change
Computer services	1,820	456	92.4
Engineering services	1,202	182	-51.5
Total	**3,022**	**638**	**4.3**

In 1998, the engineering services industries reversed the large gains of a year earlier when exports more than doubled, such that they were almost back at their 1996 levels. However, the growth in exports of computer services more than offset this decline, almost doubling from a year earlier to $456 million. As a result, total service exports posted a moderate increase of 4.3% overall.

5 Detailed Tables I
The High Technology Sector's Contribution to the BC Economy

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Detailed Table 1. Gross Domestic Product (GDP) (Constant Dollar) at Factor Cost[1] by Industry, 1991-2000

SIC	INDUSTRY	Constant dollars (1992 $ million) 1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 (p)
Manufacturing Industries		**260.6**	**340.3**	**312.5**	**355.6**	**391.6**	**520.0**	**589.1**	**732.5**	**798.8**	**925.9**
3192	Construction and Mining Machinery	14.1	12.5	12.3	15.7	20.0	*	14.8	14.2	12.9	-
321	Aircraft and Aircraft Parts Industry	49.5	50.1	36.4	44.6	51.2	73.4	62.2	75.0	99.1	-
3359	Other Communication and Electrical Equipment	46.4	50.9	38.4	37.1	44.3	114.0	97.5	104.6	122.1	-
3361	Electronic Computing and Peripheral Equipment	*	*	48.1	61.7	73.1	55.1	151.8	205.1	194.2	-
337grp[2]	Electrical Industrial Equipment Group	28.0	43.1	37.6	36.2	37.4	31.9	32.0	34.3	26.5	-
3711	Industrial Inorganic Chemicals	7.6	7.6	9.7	10.4	9.8	*	*	*	*	-
3911	Indicating, Recording & Controlling Instruments	5.6	12.1	16.6	16.0	21.7	28.5	38.7	49.9	56.9	-
	Other High Technology Manufacturing	*	*	113.4	133.9	134.1	193.4	*	*	*	-
Service Industries		**1,414.2**	**1,391.7**	**1,545.4**	**1,642.4**	**1,848.7**	**1,880.8**	**2,126.3**	**2,202.8**	**2,383.7**	**2,782.2**
772	Computer And Related Services	391.8	418.4	554.7	571.3	760.2	708.5	863.3	935.2	1,145.3	-
7752[3]	Engineering Services	690.5	639.5	642.8	650.4	671.0	618.7	759.5	702.5	685.1	-
7759[3]	Scientific and Technical Services	266.4	266.1	282.0	352.6	342.0	467.8	426.4	493.1	480.8	-
868	Medical and other Health Laboratories	65.6	67.7	65.9	68.0	75.5	85.9	77.0	72.0	72.6	-
High Technology Sector Total		**1,674.8**	**1,732.0**	**1,857.8**	**1,997.9**	**2,240.3**	**2,400.8**	**2,715.4**	**2,935.3**	**3,182.5**	**3,708.2**
BC Industrial Aggregate		**73,153.8**	**75,332.3**	**78,953.2**	**82,628.1**	**84,863.4**	**86,731.4**	**89,258.4**	**89,592.8**	**91,965.1**	**95,185.9**
High Technology as % of Total		**2.3%**	**2.3%**	**2.4%**	**2.4%**	**2.6%**	**2.8%**	**3.0%**	**3.3%**	**3.5%**	**3.9%**

1. GDP at factor cost is defined as the unduplicated value of output from the factors of production (labour and capital). It is calculated by subtracting the cost of intermediate commodity and service inputs as well as net indirect taxes from the gross output of each industry.
2. GDP values for SICs 3372 and 3379 were not available separately, so the two industries are presented as a group in this table.
3. GDP data are not available at the four-digit level for SICs 7752 and 7759. A ratio was applied to the GDP values for SIC 775 in order to remove SIC 7751, Offices of Architects, and obtain an estimate of the GDP of SICs 7752 (Engineers) and 7759 (Other Scientific and Technical Services).

(p) Data for 2000 is preliminary and is available only for the aggregations shown.
* Data has been suppressed by Statistics Canada for reasons of confidentiality.

Source: BC STATS and Statistics Canada

Detailed Table 1 (ctd). Gross Domestic Product (GDP) (Constant Dollar) at Factor Cost[1] by Industry, 1991-2000

		% change from previous year								
SIC	**INDUSTRY**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000 (p)**
Manufacturing Industries		**30.6**	**-8.2**	**13.8**	**10.1**	**32.8**	**13.3**	**24.3**	**9.1**	**15.9**
3192	Construction and Mining Machinery	-11.4	-1.5	27.4	27.3	*	*	-4.2	-9.2	-
3211	Aircraft and Aircraft Parts Industry	1.1	-27.3	22.5	14.8	43.5	-15.3	20.6	32.1	-
3359	Other Communication and Electrical Equipment	9.6	-24.6	-3.2	19.3	157.3	-14.5	7.3	16.7	-
3361	Electronic Computing and Peripheral Equipment	*	*	28.3	18.5	-24.7	175.6	35.1	-5.3	-
337grp[2]	Electrical Industrial Equipment Group	53.8	-12.8	-3.6	3.2	-14.6	0.3	7.1	-22.8	-
3711	Industrial Inorganic Chemicals	-0.1	28.9	6.3	-5.2	*	*	*	*	-
3911	Indicating, Recording & Controlling Instruments	114.7	37.2	-3.7	36.1	31.2	35.6	29.1	13.9	-
	Other High Technology Manufacturing	*	*	18.1	0.2	44.2	*	*	*	-
Service Industries		**-1.6**	**11.0**	**6.3**	**12.6**	**1.7**	**13.0**	**3.6**	**8.2**	**16.7**
772	Computer And Related Services	6.8	32.6	3.0	33.1	-6.8	21.9	8.3	22.5	-
7752[3]	Engineering Services	-7.4	0.5	1.2	3.2	-7.8	22.8	-7.5	-2.5	-
7759[3]	Scientific and Technical Services	-0.1	6.0	25.0	-3.0	36.8	-8.9	15.7	-2.5	-
868	Medical and other Health Laboratories	3.3	-2.7	3.2	10.9	13.8	-10.3	-6.5	0.8	-
High Technology Sector Total		**3.4**	**7.3**	**7.5**	**12.1**	**7.2**	**13.1**	**8.1**	**8.4**	**16.5**
BC Industrial Aggregate		**3.0**	**4.8**	**4.7**	**2.7**	**2.2**	**2.9**	**0.4**	**2.6**	**3.5**

1. GDP at factor cost is defined as the unduplicated value of output from the factors of production (labour and capital). It is calculated by subtracting the cost of intermediate commodity and service inputs as well as net indirect taxes from the gross output of each industry.
2. GDP values for SICs 3372 and 3379 were not available separately, so the two industries are presented as a group in this table.
3. GDP data are not available at the four-digit level for SICs 7752 and 7759. A ratio was applied to the GDP values for SIC 775 in order to remove SIC 7751, Offices of Architects, and obtain an estimate of the GDP of SICs 7752 (Engineers) and 7759 (Other Scientific and Technical Services).

(p) Data for 2000 is preliminary and is available only for the aggregations shown.
* Data has been suppressed by Statistics Canada for reasons of confidentiality.

Source: BC STATS and Statistics Canada

Detailed Table 2. Gross Domestic Product (GDP) (Current Dollar) at Factor Cost[1] by Industry, 1991-2000

		Current dollars ($ million)									
SIC	**INDUSTRY**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000 (p)**
Manufacturing Industries		**257.5**	**340.3**	**338.5**	**368.4**	**506.8**	**651.7**	**673.3**	**826.8**	**886.7**	**1,010.3**
3192	Construction and Mining Machinery	13.2	12.5	12.1	15.0	19.6	*	16.2	15.9	14.9	-
3211	Aircraft and Aircraft Parts Industry	41.9	50.1	33.4	51.8	66.0	94.8	76.0	99.5	133.0	-
3359	Other Communication and Electrical Equipment	51.1	50.9	40.3	38.7	48.7	135.2	104.8	105.9	121.3	-
3361	Electronic Computing and Peripheral Equipment	*	*	65.8	63.1	164.5	106.4	170.7	232.5	211.1	-
337grp[2]	Electrical Industrial Equipment Group	27.6	43.1	41.1	38.5	41.4	45.3	41.7	44.8	34.6	-
3711	Industrial Inorganic Chemicals	8.7	7.6	12.6	13.0	16.5	*	*	*	*	-
3911	Indicating, Recording & Controlling Instruments	5.9	12.1	16.5	16.5	23.3	35.2	49.6	66.6	77.7	-
	Other High Technology Manufacturing	*	*	116.7	131.8	126.9	203.9	*	*	*	-
Service Industries		**1,375.5**	**1,391.7**	**1,528.6**	**1,596.1**	**1,809.8**	**1,768.6**	**2,115.6**	**2,177.6**	**2,380.0**	**2,810.6**
772	Computer And Related Services	389.2	418.4	519.8	489.6	674.4	648.9	754.3	831.3	1,025.2	-
7752[3]	Engineering Services	666.8	639.5	653.9	672.4	699.3	583.1	813.8	743.1	745.6	-
7759[3]	Scientific and Technical Services	257.3	266.1	286.8	364.5	356.5	440.9	456.8	521.5	523.3	-
868	Medical and other Health Laboratories	62.1	67.7	68.1	69.4	79.6	95.7	90.7	81.7	85.8	-
High Technology Sector Total		**1,633.0**	**1,732.0**	**1,867.1**	**1,964.4**	**2,316.6**	**2,420.3**	**2,788.9**	**3,004.3**	**3,266.7**	**3,820.9**
BC Industrial Aggregate		**71,768.3**	**75,332.3**	**81,073.6**	**87,639.4**	**91,779.0**	**94,261.1**	**98,837.5**	**99,126.9**	**104,158.7**	**111,182.9**
High Technology as % of Total		**2.3%**	**2.3%**	**2.3%**	**2.2%**	**2.5%**	**2.6%**	**2.8%**	**3.0%**	**3.1%**	**3.4%**

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2. GDP values for SICs 3372 and 3379 were not available separately, so the two industries are presented as a group in this table.
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Source: BC STATS and Statistics Canada

Detailed Table 2 (ctd). Gross Domestic Product (GDP) (Current Dollar) at Factor Cost[1] by Industry, 1991-2000

		% change from previous year								
SIC	**INDUSTRY**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000 (p)**
Manufacturing Industries		**32.1**	**-0.5**	**8.8**	**37.6**	**28.6**	**3.3**	**22.8**	**7.3**	**13.9**
3192	Construction and Mining Machinery	-5.3	-2.8	23.9	30.4	*	*	-1.8	-6.4	-
3211	Aircraft and Aircraft Parts Industry	19.5	-33.3	55.2	27.3	43.7	-19.9	30.9	33.8	-
3359	Other Communication and Electrical Equipment	-0.5	-20.7	-4.0	25.7	177.8	-22.5	1.1	14.6	-
3361	Electronic Computing and Peripheral Equipment	*	*	-4.2	160.9	-35.3	60.5	36.3	-9.2	-
337grp[2]	Electrical Industrial Equipment Group	56.0	-4.6	-6.3	7.6	9.4	-7.8	7.4	-22.8	-
3711	Industrial Inorganic Chemicals	-13.0	66.9	2.8	27.3	*	*	*	*	-
3911	Indicating, Recording & Controlling Instruments	105.9	36.6	-0.1	41.6	51.0	40.8	34.2	16.6	-
	Other High Technology Manufacturing	*	*	13.0	-3.8	60.7	*	*	*	-
Service Industries		**1.2**	**9.8**	**4.4**	**13.4**	**-2.3**	**19.6**	**2.9**	**9.3**	**18.1**
772	Computer And Related Services	7.5	24.2	-5.8	37.7	-3.8	16.2	10.2	23.3	-
7752[3]	Engineering Services	-4.1	2.3	2.8	4.0	-16.6	39.6	-8.7	0.3	-
7759[3]	Scientific and Technical Services	3.4	7.8	27.1	-2.2	23.7	3.6	14.2	0.3	-
868	Medical and other Health Laboratories	9.1	0.5	2.0	14.7	20.3	-5.3	-9.9	5.0	-
High Technology Sector Total		**6.1**	**7.8**	**5.2**	**17.9**	**4.5**	**15.2**	**7.7**	**8.7**	**17.0**
BC Industrial Aggregate		**5.0**	**7.6**	**8.1**	**4.7**	**2.7**	**4.9**	**0.3**	**5.1**	**6.7**

1. GDP at factor cost is defined as the unduplicated value of output from the factors of production (labour and capital). It is calculated by subtracting the cost of intermediate commodity and service inputs as well as net indirect taxes from the gross output of each industry.
2. GDP values for SICs 3372 and 3379 were not available separately, so the two industries are presented as a group in this table.
3. GDP data are not available at the four-digit level for SICs 7752 and 7759. A ratio was applied to the GDP values for SIC 775 in order to remove SIC 7751, Offices of Architects, and obtain an estimate of the GDP of SICs 7752 (Engineers) and 7759 (Other Scientific and Technical Services).

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Source: BC STATS and Statistics Canada

Detailed Table 3. Gross Domestic Product (GDP) (Constant Dollar) at Factor Cost,[1] Selected Activities, 1991-2000

	Constant (1992 $ million)									
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 (p)
Goods-Producing Industries[2]	**21,029**	**20,992**	**21,762**	**22,331**	**22,584**	**22,703**	**23,252**	**22,584**	**23,359**	**24,178**
Agriculture and Related	1,587	1,821	1,789	1,646	1,749	1,900	1,981	2,017	2,140	-
Fishing, Trapping and Related	523	484	629	551	410	374	428	349	315	-
Forestry and Related	5,027	5,233	5,718	5,672	5,563	5,154	5,170	4,911	5,630	-
Mining and Related	3,355	3,012	3,156	3,330	3,571	*	3,789	3,906	3,751	-
Other Manufacturing	2,283	2,297	2,369	2,596	2,794	*	3,017	3,283	3,438	-
Construction	5,832	5,877	5,950	6,366	6,264	6,213	6,547	5,776	5,727	-
Utilities	2,320	2,267	2,153	2,170	2,234	2,457	2,321	2,341	2,358	-
Service-Producing Industries[2]	**52,080**	**54,341**	**57,191**	**60,298**	**62,279**	**64,029**	**66,006**	**67,009**	**68,606**	**71,007**
Transportation and Storage	4,217	4,476	4,706	5,144	5,330	5,384	5,508	5,456	5,567	-
Communication	2,273	2,242	2,420	2,537	2,572	2,658	2,680	2,883	3,297	-
Wholesale Trade	3,597	3,951	4,136	4,465	4,215	4,516	4,722	4,823	5,168	-
Retail Trade	4,595	4,834	5,182	5,376	5,700	5,990	6,259	6,213	6,350	-
Finance, Insurance and Real Estate	6,802	7,206	7,534	8,034	8,118	8,125	8,532	8,557	8,565	-
Owner-occupied Dwellings	6,761	7,083	7,552	7,938	8,298	8,570	8,706	8,986	9,316	-
Business Services	3,652	3,622	4,018	4,221	4,566	4,611	4,949	5,131	5,438	-
Education	4,285	4,375	4,562	4,690	5,096	5,573	5,663	5,645	5,677	-
Health and Social Services	5,540	5,712	5,715	6,023	6,164	6,249	6,123	6,236	6,284	-
Accommodation, Food & Beverages	2,588	2,734	2,927	3,131	3,275	3,285	3,421	3,633	3,540	-
Other services	3,184	3,293	3,485	3,717	3,897	4,017	4,400	4,378	4,295	-
Government Services	4,648	4,812	4,954	5,022	5,049	5,050	5,044	5,069	5,108	-
All Industries	**73,154**	**75,332**	**78,953**	**82,628**	**84,863**	**86,731**	**89,258**	**89,593**	**91,965**	**95,186**
High technology sector[2]	**1,675**	**1,732**	**1,858**	**1,998**	**2,240**	**2,401**	**2,715**	**2,935**	**3,183**	**3,708**
Tourism sector[2]	**3,387**	**3,564**	**3,726**	**3,961**	**4,144**	**4,216**	**4,314**	**4,370**	**4,357**	**4,529**

1. GDP at factor cost is defined as the unduplicated value of output from the factors of production (labour and capital). It is calculated by subtracting the cost of intermediate commodity and service inputs as well as net indirect taxes from the gross output of each industry.
2. These industries are not mutually exclusive. High Technology and Tourism sector totals are calculated as sub-components of other industries. As well, some of the labels in this table represent larger industry aggregations than others. For instance, there are 13 four-digit SICs in the Mining category, 21 four-digit SICs in Food Industries and 47 four-digit SICs in Finance, Insurance and Real Estate.

(p) Data for 2000 is preliminary and is available only for the aggregations shown.
* Data has been suppressed by Statistics Canada for reasons of confidentiality.

Source: BC STATS and Statistics Canada

Detailed Table 3 (ctd). Gross Domestic Product (GDP) (Constant Dollar) at Factor Cost,[1] Selected Activities, 1991-2000

	% change from previous year								
	1992	1993	1994	1995	1996	1997	1998	1999	2000 (p)
Goods-Producing Industries[2]	**-0.2**	**3.7**	**2.6**	**1.1**	**0.5**	**2.4**	**-2.9**	**3.4**	**3.5**
Agriculture and Related	14.8	-1.8	-8.0	6.3	8.6	4.2	1.9	6.1	-
Fishing, Trapping and Related	-7.4	29.8	-12.4	-25.6	-8.6	14.4	-18.4	-9.7	-
Forestry and Related	4.1	9.3	-0.8	-1.9	-7.4	0.3	-5.0	14.6	-
Mining and Related	-10.2	4.7	5.5	7.2	*	*	3.1	-4.0	-
Other Manufacturing	0.6	3.1	9.6	7.6	*	*	8.8	4.7	-
Construction	0.8	1.2	7.0	-1.6	-0.8	5.4	-11.8	-0.8	-
Utilities	-2.3	-5.0	0.8	2.9	10.0	-5.5	0.9	0.7	-
Service-Producing Industries[2]	**4.3**	**5.2**	**5.4**	**3.3**	**2.8**	**3.1**	**1.5**	**2.4**	**3.5**
Transportation and Storage	6.2	5.1	9.3	3.6	1.0	2.3	-0.9	2.0	-
Communication	-1.3	7.9	4.8	1.4	3.3	0.8	7.6	14.4	-
Wholesale Trade	9.8	4.7	8.0	-5.6	7.2	4.6	2.1	7.1	-
Retail Trade	5.2	7.2	3.8	6.0	5.1	4.5	-0.7	2.2	-
Finance, Insurance and Real Estate	5.9	4.6	6.6	1.0	0.1	5.0	0.3	0.1	-
Owner-occupied Dwellings	4.8	6.6	5.1	4.5	3.3	1.6	3.2	3.7	-
Business Services	-0.8	10.9	5.0	8.2	1.0	7.3	3.7	6.0	-
Education	2.1	4.3	2.8	8.7	9.4	1.6	-0.3	0.6	-
Health and Social Services	3.1	0.1	5.4	2.4	1.4	-2.0	1.8	0.8	-
Accommodation, Food & Beverages	5.6	7.1	7.0	4.6	0.3	4.1	6.2	-2.6	-
Other services	3.4	5.8	6.7	4.8	3.1	9.5	-0.5	-1.9	-
Government Services	3.5	2.9	1.4	0.5	0.0	-0.1	0.5	0.8	-
All Industries	**3.0**	**4.8**	**4.7**	**2.7**	**2.2**	**2.9**	**0.4**	**2.6**	**3.5**
High technology sector[2]	**3.4**	**7.3**	**7.5**	**12.1**	**7.2**	**13.1**	**8.1**	**8.4**	**16.5**
Tourism sector[2]	**5.2**	**4.5**	**6.3**	**4.6**	**1.7**	**2.3**	**1.3**	**-0.3**	**3.9**

1. GDP at factor cost is defined as the unduplicated value of output from the factors of production (labour and capital). It is calculated by subtracting the cost of intermediate commodity and service inputs as well as net indirect taxes from the gross output of each industry.
2. These industries are not mutually exclusive. High Technology and Tourism sector totals are calculated as sub-components of other industries. As well, some of the labels in this table represent larger industry aggregations than others. For instance, there are 13 four-digit SICs in the Mining category, 21 four-digit SICs in Food Industries and 47 four-digit SICs in Finance, Insurance and Real Estate.

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Source: BC STATS and Statistics Canada

Detailed Table 4. Gross Domestic Product (GDP) (Current Dollar) at Factor Cost,[1] Selected Activities, 1991-2000

	Current ($ million)									
	1991	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000 (p)**
Goods-Producing Industries[2]	**20,506**	**20,992**	**23,243**	**26,116**	**27,507**	**27,244**	**27,876**	**26,274**	**28,394**	**30,691**
Agriculture and Related	1,624	1,821	1,819	1,715	1,713	1,874	2,077	2,156	2,262	-
Fishing, Trapping and Related	532	484	582	794	726	579	444	376	383	-
Forestry and Related	4,656	5,233	7,031	8,462	9,172	8,734	8,617	7,365	8,976	-
Mining and Related	3,875	3,012	3,259	3,953	4,254	*	4,431	4,362	4,405	-
Other Manufacturing	2,216	2,297	2,442	2,690	3,138	*	3,516	3,871	4,092	-
Construction	5,428	5,877	6,082	6,408	6,251	5,966	6,271	5,592	5,655	-
Utilities	2,174	2,267	2,028	2,094	2,253	2,540	2,521	2,551	2,621	-
Service-Producing Industries[2]	**51,262**	**54,341**	**57,831**	**61,524**	**64,272**	**67,017**	**70,961**	**72,853**	**75,765**	**80,492**
Transportation and Storage	4,391	4,476	4,670	5,193	5,495	5,273	5,709	5,867	5,964	-
Communication	2,219	2,242	2,481	2,590	2,656	2,835	3,101	3,392	4,016	-
Wholesale Trade	3,806	3,951	4,198	4,546	4,522	4,847	5,071	4,858	5,058	-
Retail Trade	4,747	4,834	5,149	5,264	5,522	5,938	6,195	6,380	6,534	-
Finance, Insurance and Real Estate	6,752	7,206	7,679	7,945	7,943	8,500	9,532	9,823	10,047	-
Owner-occupied Dwellings	6,608	7,083	7,632	8,184	8,746	9,113	9,268	9,556	9,830	-
Business Services	3,485	3,622	4,080	4,319	4,736	4,853	5,432	5,829	6,287	-
Education	3,991	4,375	4,571	4,879	5,086	5,231	5,374	5,521	5,812	-
Health and Social Services	5,195	5,712	5,997	6,415	6,651	7,032	7,287	7,277	7,653	-
Accommodation, Food & Beverages	2,513	2,734	2,931	3,140	3,383	3,547	3,687	3,924	3,891	-
Other services	3,113	3,293	3,463	3,805	4,103	4,359	4,773	4,915	4,977	-
Government Services	4,443	4,812	4,980	5,244	5,431	5,490	5,533	5,511	5,695	-
All Industries	**71,768**	**75,332**	**81,074**	**87,639**	**91,779**	**94,261**	**98,837**	**99,127**	**104,159**	**111,183**
High technology sector[2]	**1,633**	**1,732**	**1,867**	**1,964**	**2,317**	**2,420**	**2,789**	**3,004**	**3,267**	**3,821**
Tourism sector[2]	**3,449**	**3,564**	**3,801**	**4,113**	**4,438**	**4,692**	**4,977**	**5,069**	**5,040**	**5,390**

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Source: BC STATS and Statistics Canada

Detailed Table 4 (ctd). Gross Domestic Product (GDP) (Current Dollar) at Factor Cost,[1] Selected Activities, 1991-2000

	% change from previous year								
	1992	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000 (p)**
Goods-Producing Industries[2]	**2.4**	**10.7**	**12.4**	**5.3**	**-1.0**	**2.3**	**-5.7**	**8.1**	**8.1**
Agriculture and Related	12.2	-0.1	-5.7	-0.1	9.4	10.8	3.8	4.9	-
Fishing, Trapping and Related	-9.1	20.2	36.4	-8.6	-20.2	-23.4	-15.1	1.6	-
Forestry and Related	12.4	34.4	20.4	8.4	-4.8	-1.3	-14.5	21.9	-
Mining and Related	-22.3	8.2	21.3	7.6	*	*	-1.6	1.0	-
Other Manufacturing	3.6	6.3	10.2	16.6	*	*	10.1	5.7	-
Construction	8.3	3.5	5.3	-2.4	-4.6	5.1	-10.8	1.1	-
Utilities	4.3	-10.5	3.3	7.6	12.7	-0.7	1.2	2.7	-
Service-Producing Industries[2]	**6.0**	**6.4**	**6.4**	**4.5**	**4.3**	**5.9**	**2.7**	**4.0**	**6.2**
Transportation and Storage	1.9	4.3	11.2	5.8	-4.0	8.3	2.8	1.7	-
Communication	1.1	10.6	4.4	2.5	6.8	9.4	9.4	18.4	-
Wholesale Trade	3.8	6.2	8.3	-0.5	7.2	4.6	-4.2	4.1	-
Retail Trade	1.8	6.5	2.2	4.9	7.5	4.3	3.0	2.4	-
Finance, Insurance and Real Estate	6.7	6.6	3.5	0.0	7.0	12.1	3.0	2.3	-
Owner-occupied Dwellings	7.2	7.7	7.2	6.9	4.2	1.7	3.1	2.9	-
Business Services	3.9	12.6	5.9	9.7	2.5	11.9	7.3	7.9	-
Education	9.6	4.5	6.7	4.2	2.9	2.7	2.7	5.3	-
Health and Social Services	10.0	5.0	7.0	3.7	5.7	3.6	-0.1	5.2	-
Accommodation, Food & Beverages	8.8	7.2	7.1	7.7	4.9	3.9	6.4	-0.8	-
Other services	5.8	5.2	9.9	7.8	6.2	9.5	3.0	1.3	-
Government Services	8.3	3.5	5.3	3.6	1.1	0.8	-0.4	3.4	-
All Industries	**5.0**	**7.6**	**8.1**	**4.7**	**2.7**	**4.9**	**0.3**	**5.1**	**6.7**
High technology sector[2]	**6.1**	**7.8**	**5.2**	**17.9**	**4.5**	**15.2**	**7.7**	**8.7**	**17.0**
Tourism sector[3]	**3.4**	**6.6**	**8.2**	**7.9**	**5.7**	**6.1**	**1.8**	**-0.6**	**6.9**

1. GDP at factor cost is defined as the unduplicated value of output from the factors of production (labour and capital). It is calculated by subtracting the cost of intermediate commodity and service inputs as well as net indirect taxes from the gross output of each industry.
2. These industries are not mutually exclusive. High Technology and Tourism sector totals are calculated as sub-components of other industries. As well, some of the labels in this table represent larger industry aggregations than others. For instance, there are 13 four-digit SICs in the Mining category, 21 four-digit SICs in Food Industries and 47 four-digit SICs in Finance, Insurance and Real Estate.

(p) Data for 2000 is preliminary and is available only for the aggregations shown.
* Data has been suppressed by Statistics Canada for reasons of confidentiality.

Source: BC STATS and Statistics Canada

Detailed Table 5. High Technology GDP (Constant Dollar) at Factor Cost, by Province, 1991-2000

		Constant (1992 $ million)									
Province		**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000 (p)**
Canada	Manufacturing	11,604	11,758	11,799	12,604	14,263	14,165	15,521	17,214	19,449	25,002
	Services	10,843	10,357	11,511	12,732	14,223	14,802	16,900	18,626	20,731	23,587
	Total	22,447	22,114	23,310	25,335	28,487	28,967	32,420	35,840	40,180	48,589
British Columbia	Manufacturing	261	340	312	356	392	520	589	733	799	926
	Services	1,414	1,392	1,545	1,642	1,849	1,881	2,126	2,203	2,384	2,782
	Total	1,675	1,732	1,858	1,998	2,240	2,401	2,715	2,935	3,183	3,708
Alberta	Manufacturing	403	385	398	533	641	683	525	534	532	582
	Services	1,324	1,199	1,529	1,814	1,986	2,055	2,546	2,736	2,863	3,346
	Total	1,727	1,584	1,927	2,347	2,626	2,738	3,071	3,270	3,395	3,928
Ontario	Manufacturing	6,497	6,573	6,513	6,955	8,052	7,652	8,492	9,463	10,313	13,448
	Services	4,847	4,636	4,838	5,498	6,140	6,654	7,870	8,926	10,369	11,993
	Total	11,344	11,209	11,351	12,453	14,192	14,307	16,362	18,389	20,683	25,441
Quebec	Manufacturing	3,750	3,775	4,049	4,263	4,713	4,683	4,903	5,424	6,561	8,430
	Services	2,299	2,257	2,576	2,704	3,093	3,096	3,336	3,668	3,899	4,255
	Total	6,049	6,032	6,625	6,967	7,806	7,779	8,239	9,092	10,460	12,685

(p) Data for 2000 is preliminary.

Source: BC STATS and Statistics Canada

Detailed Table 5 (ctd). High Technology GDP (Constant Dollar) at Factor Cost, by Province, 1991-2000

		% change from previous year								
Province		**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000 (p)**
Canada	Manufacturing	1.3	0.3	6.8	13.2	-0.7	9.6	10.9	13.0	28.6
	Services	-4.5	11.1	10.6	11.7	4.1	14.2	10.2	11.3	13.8
	Total	-1.5	5.4	8.7	12.4	1.7	11.9	10.5	12.1	20.9
British Columbia	Manufacturing	30.6	-8.2	13.8	10.1	32.8	13.3	24.3	9.1	15.9
	Services	-1.6	11.0	6.3	12.6	1.7	13.0	3.6	8.2	16.7
	Total	3.4	7.3	7.5	12.1	7.2	13.1	8.1	8.4	16.5
Alberta	Manufacturing	-4.5	3.4	33.9	20.3	6.6	-23.1	1.7	-0.4	9.4
	Services	-9.4	27.5	18.6	9.5	3.5	23.9	7.5	4.6	16.9
	Total	-8.3	21.7	21.8	11.9	4.3	12.2	6.5	3.8	15.7
Ontario	Manufacturing	1.2	-0.9	6.8	15.8	-5.0	11.0	11.4	9.0	30.4
	Services	-4.4	4.4	13.6	11.7	8.4	18.3	13.4	16.2	15.7
	Total	-1.2	1.3	9.7	14.0	0.8	14.4	12.4	12.5	23.0
Quebec	Manufacturing	0.7	7.3	5.3	10.6	-0.6	4.7	10.6	21.0	28.5
	Services	-1.8	14.1	5.0	14.4	0.1	7.8	10.0	6.3	9.1
	Total	-0.3	9.8	5.2	12.0	-0.3	5.9	10.4	15.0	21.3

(p) Data for 2000 is preliminary.

Source: BC STATS and Statistics Canada

Detailed Table 6. High Technology GDP (Current Dollar) at Factor Cost, by Province, 1991-2000

		Current ($ million)									
Province		**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000 (p)**
Canada	Manufacturing	11,365	11,758	12,317	12,829	14,402	14,657	16,392	18,097	20,298	25,601
	Services	10,542	10,357	11,341	12,322	13,868	14,819	16,882	18,341	20,615	24,325
	Total	21,906	22,114	23,658	25,151	28,271	29,476	33,273	36,439	40,913	49,926
British Columbia	Manufacturing	258	340	339	368	507	652	673	827	887	1,010
	Services	1,375	1,392	1,529	1,596	1,810	1,769	2,116	2,178	2,380	2,811
	Total	1,633	1,732	1,867	1,964	2,317	2,420	2,789	3,004	3,267	3,821
Alberta	Manufacturing	397	385	411	542	636	675	598	607	602	649
	Services	1,276	1,199	1,513	1,788	1,974	2,209	2,666	2,889	2,917	3,523
	Total	1,673	1,584	1,924	2,330	2,610	2,885	3,263	3,496	3,519	4,171
Ontario	Manufacturing	6,472	6,573	6,712	6,471	7,089	7,080	8,166	8,853	9,384	11,796
	Services	4,724	4,636	4,728	5,250	5,899	6,674	7,885	8,931	10,500	12,606
	Total	11,196	11,209	11,440	11,722	12,988	13,754	16,050	17,784	19,884	24,402
Quebec	Manufacturing	3,643	3,775	4,190	4,783	5,482	5,539	6,179	7,000	8,566	11,212
	Services	2,241	2,257	2,566	2,647	3,063	3,051	3,176	3,340	3,574	3,944
	Total	5,884	6,032	6,755	7,430	8,544	8,590	9,356	10,340	12,140	15,156

(p) Data for 2000 is preliminary.

Source: BC STATS and Statistics Canada

Detailed Table 6 (ctd). High Technology GDP (Current Dollar) at Factor Cost, by Province, 1991-2000

		% change from previous year								
Province		**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000 (p)**
Canada	Manufacturing	3.5	4.8	4.2	12.3	1.8	11.8	10.4	12.2	26.1
	Services	-1.8	9.5	8.7	12.5	6.9	13.9	8.6	12.4	18.0
	Total	0.9	7.0	6.3	12.4	4.3	12.9	9.5	12.3	22.0
British Columbia	Manufacturing	32.1	-0.5	8.8	37.6	28.6	3.3	22.8	7.3	13.9
	Services	1.2	9.8	4.4	13.4	-2.3	19.6	2.9	9.3	18.1
	Total	6.1	7.8	5.2	17.9	4.5	15.2	7.7	8.7	17.0
Alberta	Manufacturing	-3.0	6.8	31.9	17.3	6.1	-11.4	1.5	-0.8	7.8
	Services	-6.0	26.2	18.2	10.4	11.9	20.7	8.4	1.0	20.8
	Total	-5.3	21.5	21.1	12.0	10.5	13.1	7.1	0.7	18.5
Ontario	Manufacturing	1.6	2.1	-3.6	9.6	-0.1	15.3	8.4	6.0	25.7
	Services	-1.9	2.0	11.0	12.4	13.1	18.1	13.3	17.6	20.1
	Total	0.1	2.1	2.5	10.8	5.9	16.7	10.8	11.8	22.7
Quebec	Manufacturing	3.6	11.0	14.2	14.6	1.0	11.6	13.3	22.4	30.9
	Services	0.7	13.7	3.2	15.7	-0.4	4.1	5.2	7.0	10.4
	Total	2.5	12.0	10.0	15.0	0.5	8.9	10.5	17.4	24.8

(p) Data for 2000 is preliminary.

Source: BC STATS and Statistics Canada

Detailed Table 7. High Technology Sector Revenues, 1990-1999

		Value ($ million)									
SIC	**INDUSTRY**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999 (p)**
Manufacturing Industries		**741.4**	**680.3**	**859.5**	**850.6**	**1,012.4**	**1,240.0**	**1,514.4**	**1,617.6**	**1,758.3**	**1,592.1**
3211	Aircraft and Aircraft Parts Industry	100.5	78.1	106.5	81.1	102.2	114.9	197.7	169.0	112.0	150.2
335	Communication and Other Electronic Equipment	162.0	151.0	229.0	206.4	240.6	335.5	533.8	541.7	621.9	556.9
336	Office, Store and Business Machines	132.0	129.0	167.0	217.7	255.0	338.1	351.0	451.5	483.0	346.2
3372	Electrical Switchgear and Protective Equipment	55.6	44.7	32.5	29.1	33.1	34.2	40.3	47.2	45.2	40.3
3379	Other Electrical Industrial Equipment Industries	48.7	45.2	81.8	53.7	54.9	66.1	80.4	94.7	83.9	74.9
3911	Indicating, Recording and Controlling Instruments Industry	19.7	14.8	27.9	37.1	42.4	46.1	72.3	90.6	88.1	85.7
3912	Other Instruments and Related Products Industry	22.7	23.5	26.4	26.8	41.5	47.4	52.8	61.6	21.8	31.6
3192	Construction, Mining Machinery & Materials Handling Equipment	36.4	33.2	32.5	29.3	36.8	45.3	*	41.3	43.5	43.5
3194	Turbine and Mechanical Power Transmission Equipment	2.6	2.9	2.2	2.8	3.6	4.6	*	5.0	5.9	8.5
3199	Other Machinery and Equipment Industries N.E.C.	6.8	5.5	4.9	4.8	5.0	6.6	*	8.8	8.4	7.7
37grp	Chemical and Chemical Products group	51.0	59.0	50.0	75.2	93.0	88.7	88.4	*	122.6	126.3
3grp	Other Manufacturing Group	57.4	51.8	59.2	49.7	58.9	56.3	44.4	*	64.0	60.6
Service Industries[1, 2]		**2,067.9**	**1,928.1**	**2,023.9**	**2,552.5**	**2,649.4**	**2,968.7**	**3,455.0**	**3,615.6**	**3,692.3**	**
772	Computer and related services	500.2	558.1	605.9	1,044.1	1,091.7	1,179.8	1,435.0	1,338.0	1,820.0	**
7752	Engineering services	1,113.3	919.3	924.6	979.7	936.9	1,098.6	1,064.3	1,529.8	1,202.4	**
7759	Scientific and Technical Services	360.6	354.7	384.8	429.8	507.9	560.0	804.7	625.9	572.2	**
868	Medical and other Health Laboratories	93.9	96.0	108.6	98.9	112.9	130.3	151.0	121.9	97.8	**
High Technology Sector Total		**2,809.3**	**2,608.4**	**2,883.4**	**3,403.1**	**3,661.8**	**4,208.7**	**4,969.4**	**5,233.2**	**5,450.6**	**

(P) 1999 estimates are preliminary.

1. Note that revenues for the service industries are collected on a company rather than establishment basis. As a result, revenues for SICs 772, 7752, 7759 and 868 represent the entire Canadian earnings of companies headquartered in British Columbia.
2. Note that 1999 revenue figures for the service industries were not available for BC and were calculated based on historical shares of the Canadian total.

* Data has been suppressed by Statistics Canada for reasons of confidentiality.

** Data for the service industries for 1999 is not available.

Source: BC STATS and Statistics Canada

Detailed Table 7 (ctd). High Technology Sector Revenues, 1990-1999

SIC	INDUSTRY	% change from previous year 1991	1992	1993	1994	1995	1996	1997	1998	1999
Manufacturing Industries		**-8.2**	**26.3**	**-1.0**	**19.0**	**22.5**	**22.1**	**6.8**	**8.7**	**-9.5**
3211	Aircraft and Aircraft Parts Industry	-22.3	36.3	-23.8	26.0	12.4	72.0	-14.5	-33.7	34.1
335	Communication and Other Electronic Equipment	-6.8	51.7	-9.9	16.6	39.5	59.1	1.5	14.8	-10.5
336	Office, Store and Business Machines	-2.3	29.5	30.4	17.1	32.6	3.8	28.6	7.0	-28.3
3372	Electrical Switchgear and Protective Equipment	-19.6	-27.2	-10.5	13.7	3.5	17.8	16.9	-4.1	-10.8
3379	Other Electrical Industrial Equipment Industries	-7.3	81.0	-34.3	2.2	20.3	21.8	17.7	-11.4	-10.8
3911	Indicating, Recording and Controlling Instruments Industry	-24.6	88.1	33.0	14.3	8.7	57.0	25.2	-2.7	-2.8
3912	Other Instruments and Related Products Industry	3.3	12.4	1.7	54.6	14.2	11.5	16.7	-64.6	44.8
3192	Construction, Mining Machinery & Materials Handling Equipment	-8.8	-2.2	-9.6	25.3	23.0	*	*	5.4	0.0
3194	Turbine and Mechanical Power Transmission Equipment	8.4	-21.5	23.6	31.4	25.7	*	*	17.3	44.9
3199	Other Machinery and Equipment Industries N.E.C.	-19.1	-10.8	-2.2	4.4	31.3	*	*	-4.7	-8.7
37grp	Chemical and Chemical Products group	15.7	-15.3	50.4	23.6	-4.6	-0.3	*	*	3.0
3grp	Other Manufacturing Group	-9.7	14.3	-16.0	18.5	-4.5	-21.2	*	*	-5.3
Service Industries[1, 2]		**-6.8**	**5.0**	**26.1**	**3.8**	**12.1**	**16.4**	**4.6**	**2.1**	**
772	Computer and related services	11.6	8.6	72.3	4.6	8.1	21.6	-6.8	36.0	**
7752	Engineering services	-17.4	0.6	6.0	-4.4	17.3	-3.1	43.7	-21.4	**
7759	Scientific and Technical Services	-1.6	8.5	11.7	18.2	10.3	43.7	-22.2	-8.6	**
868	Medical and other Health Laboratories	2.3	13.1	-9.0	14.2	15.4	15.9	-19.3	-19.8	**
High Technology Sector Total		**-7.2**	**10.5**	**18.0**	**7.6**	**14.9**	**18.1**	**5.3**	**4.2**	**

(P) 1999 estimates are preliminary.

1. Note that revenues for the service industries are collected on a company rather than establishment basis. As a result, revenues for SICs 772, 7752, 7759 and 868 represent the entire Canadian earnings of companies headquartered in British Columbia.
2. Note that 1999 revenue figures for the service industries were not available for BC and were calculated based on historical shares of the Canadian total.

* Data has been suppressed by Statistics Canada for reasons of confidentiality.

** Data for the service industries for 1999 is not available.

Source: BC STATS and Statistics Canada

Detailed Table 8. High Technology Sector Employment, 1990-2000

SIC	INDUSTRY	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Manufacturing Industries		**7,020**	**6,100**	**6,660**	**7,230**	**6,780**	**7,330**	**8,120**	**9,580**	**9,840**	**12,350**	**14,290**
3211	Aircraft and Aircraft Parts Industry	600	580	550	850	820	790	1,020	1,170	1,010	1,550	1,970
335	Communication and Other Electronic Equipment	1,900	1,630	2,110	2,000	1,950	2,430	2,630	3,010	3,460	5,220	5,670
336	Office, Store and Business Machines	1,080	1,100	1,300	1,360	1,410	1,500	1,450	1,710	1,610	1,630	2,430
3372	Electrical Switchgear and Protective Equipment	360	270	240	230	210	180	210	330	320	380	440
3379	Other Electrical Industrial Equipment Industries	280	250	280	270	200	280	400	620	540	650	750
3911	Indicating, Recording and Controlling Instruments Industry	660	450	630	730	500	490	720	750	770	760	750
3912	Other Instruments and Related Products Industry	630	580	530	620	480	540	640	600	550	550	540
3192	Construction, Mining Machinery & Materials Handling Equipment	280	230	160	230	250	280	260	290	280	280	320
3194	Turbine and Mechanical Power Transmission Equipment	20	20	10	20	30	20	20	30	30	30	40
3199	Other Machinery and Equipment Industries.	60	40	30	40	40	40	50	50	50	50	60
37grp	Chemical and Chemical Products Group	520	470	380	450	580	460	470	720	870	860	920
3grp	Other Manufacturing Group	610	480	440	430	310	310	240	290	350	390	400
Service Industries		**20,110**	**22,930**	**22,870**	**24,500**	**26,250**	**31,890**	**33,530**	**35,650**	**37,200**	**40,040**	**46,600**
772	Computer and related services	5,390	7,920	10,160	9,850	9,780	9,490	11,210	12,500	13,710	16,580	20,910
7752	Engineering services	9,510	8,870	7,300	8,500	9,250	13,080	11,060	11,680	11,780	11,530	12,510
7759	Scientific and Technical Services	3,080	3,420	3,040	3,730	5,010	6,670	8,360	8,830	8,900	8,720	9,460
868	Medical and other Health Laboratories	2,130	2,720	2,380	2,430	2,210	2,650	2,900	2,630	2,810	3,200	3,710
High Technology Sector Total		**27,130**	**29,030**	**29,520**	**31,730**	**33,030**	**39,210**	**41,650**	**45,230**	**47,040**	**52,390**	**60,890**
BC Industrial Aggregate		**1,285,620**	**1,259,740**	**1,259,170**	**1,313,100**	**1,342,940**	**1,393,190**	**1,408,520**	**1,441,670**	**1,454,560**	**1,456,200**	**1,515,980**

Source: BC STATS and Statistics Canada

Detailed Table 8 (ctd). High Technology Sector Employment, 1990-2000

% change from previous year

Year-Over-Year Change											
SIC	**INDUSTRY**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
Manufacturing Industries		**-13.2**	**9.1**	**8.6**	**-6.2**	**8.1**	**10.9**	**18.0**	**2.8**	**25.5**	**15.7**
3211	Aircraft and Aircraft Parts Industry	-3.3	-4.5	53.4	-3.8	-3.2	29.4	14.4	-13.8	54.4	26.9
335	Communication and Other Electronic Equipment	-14.4	29.7	-5.3	-2.3	24.3	8.4	14.5	14.8	50.8	8.6
336	Office, Store and Business Machines	2.1	17.2	4.7	4.1	6.2	-3.4	17.8	-5.5	1.3	48.8
3372	Electrical Switchgear and Protective Equipment	-25.4	-12.6	-2.1	-10.5	-10.6	14.6	56.6	-3.5	19.1	16.2
3379	Other Electrical Industrial Equipment Industries	-13.5	15.4	-5.4	-25.5	39.2	42.4	56.9	-12.3	19.1	16.2
3911	Indicating, Recording and Controlling Instruments Industry	-32.0	40.4	15.8	-31.7	-2.9	48.0	4.8	1.7	-1.1	-1.7
3912	Other Instruments and Related Products Industry	-8.3	-8.9	17.3	-21.9	11.8	18.6	-5.8	-8.6	-1.1	-1.7
3192	Construction, Mining Machinery & Materials Handling Equipment	-17.7	-30.7	44.9	7.4	11.7	-5.1	8.6	-3.6	1.7	14.3
3194	Turbine and Mechanical Power Transmission Equipment	-8.4	-34.4	52.4	12.2	-1.0	-1.0	19.9	14.6	1.7	14.3
3199	Other Machinery and Equipment Industries	-29.0	-33.6	42.2	4.6	-4.3	25.0	1.4	-0.3	1.7	14.3
37grp	Chemical and Chemical Products Group	-10.7	-19.2	18.1	30.2	-20.4	2.5	52.4	20.1	-1.0	7.3
3grp	Other Manufacturing Group	-21.6	-8.9	-1.5	-27.9	1.2	-23.3	22.8	19.9	9.5	2.6
Service Industries		**14.1**	**-0.3**	**7.1**	**7.2**	**21.5**	**5.1**	**6.3**	**4.3**	**7.6**	**16.4**
772	Computer and related services	46.9	28.3	-3.1	-0.6	-3.0	18.1	11.5	9.7	21.0	26.1
7752	Engineering services	-6.7	-17.8	16.5	8.8	41.5	-15.5	5.6	0.8	-2.1	8.5
7759	Scientific and Technical Services	11.2	-11.3	22.8	34.5	33.0	25.4	5.6	0.8	-2.1	8.5
868	Medical and other Health Laboratories	27.5	-12.6	2.1	-9.1	19.8	9.4	-9.0	6.6	13.8	16.2
High Technology Sector Total		**7.0**	**1.7**	**7.5**	**4.1**	**18.7**	**6.2**	**8.6**	**4.0**	**11.4**	**16.2**
BC Industrial Aggregate		**-2.0**	**0.0**	**4.3**	**2.3**	**3.7**	**1.1**	**2.4**	**0.9**	**0.1**	**4.1**

Source: BC STATS and Statistics Canada

Detailed Table 9. Employment by Industry, British Columbia, 1990-2000

	Persons (thousands)										
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Primary & Goods Producing Industries (excluding agriculture & fishing)	**302.9**	**275.7**	**270.1**	**274.6**	**282.7**	**280.0**	**283.3**	**291.8**	**291.1**	**290.0**	**304.9**
Agriculture & Related	na	na	na	na	na	na	na	na	na	na	na
Agriculture	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*
Food (excl. fish products)	*14.8*	*14.7*	*13.9*	*13.2*	*14.4*	*13.5*	*15.0*	*16.2*	*16.6*	*15.4*	*16.7*
Beverages	*3.3*	*2.7*	*2.7*	*2.6*	*3.3*	*3.3*	*2.6*	*3.2*	*3.3*	*3.5*	*3.6*
Fishing & Related	na	na	na	na	na	na	na	na	na	na	na
Fishing	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*
Fish Products	*4.1*	*4.0*	*4.1*	*4.2*	*4.7*	*3.4*	*3.7*	*3.7*	*3.6*	*3.0*	*3.0*
Forestry & Related	89.8	86.1	81.5	83.6	89.3	87.6	88.1	86.6	82.3	85.7	90.5
Logging & Forestry	*23.2*	*25.3*	*24.4*	*26.8*	*28.5*	*29.5*	*29.3*	*28.8*	*27.3*	*28.4*	*30.4*
Paper & Allied Products	*22.3*	*20.9*	*18.5*	*18.7*	*18.0*	*18.2*	*16.5*	*14.8*	*15.0*	*15.9*	*16.6*
Wood Manufacturing	*44.3*	*39.8*	*38.6*	*38.1*	*42.8*	*39.9*	*42.3*	*43.0*	*40.1*	*41.4*	*43.5*
Mining & Related	40.8	35.0	32.3	32.4	34.2	36.0	34.5	36.1	36.6	34.3	36.2
Other Manufacturing	68.6	57.5	56.2	57.3	56.5	56.3	57.5	61.4	65.0	67.4	71.2
Construction	73.3	66.5	69.7	70.3	69.1	69.1	70.9	73.9	72.0	68.1	70.5
Utilities	8.3	9.2	9.8	11.1	11.3	10.9	11.0	10.7	11.8	12.6	13.1
Service Producing Industries	**982.7**	**984.1**	**989.1**	**1,038.5**	**1,060.2**	**1,113.1**	**1,125.3**	**1,149.9**	**1,163.4**	**1,166.2**	**1,211.1**
Transportation, Storage & Communication	105.5	107.2	96.8	99.2	106.6	112.6	100.8	101.9	101.9	101.4	102.6
Retail & Wholesale Trade	256.0	251.4	252.3	260.7	253.9	267.3	269.0	273.8	276.9	278.1	291.4
Finance, Insurance & Real Estate	77.5	81.0	82.1	90.3	87.0	87.9	85.2	89.1	90.0	88.1	90.5
Educational & Related	99.1	100.8	102.1	110.2	111.3	119.0	127.7	128.5	129.6	131.2	134.5
Health & Social	124.8	131.5	134.8	132.9	143.5	149.8	153.5	154.1	159.4	163.2	167.8
Accommodation, Food & Beverage	108.9	104.1	107.8	127.1	125.7	127.6	132.7	138.0	139.7	138.8	142.0
Amusement & Recreation	16.8	20.7	22.7	23.6	27.5	28.6	30.0	29.5	28.1	25.7	27.9
Business, Personal & Other	124.0	114.5	117.5	120.2	130.7	147.1	153.0	162.5	165.4	169.1	184.3
Government	70.1	72.8	73.2	74.4	74.2	73.3	73.3	72.5	72.5	70.6	70.0
BC Industrial Aggregate (excluding agriculture & fishing)	**1,285.6**	**1,259.7**	**1,259.2**	**1,313.1**	**1,342.9**	**1,393.2**	**1,408.5**	**1,441.7**	**1,454.6**	**1,456.2**	**1,516.0**
High Technology Sector Total	**27.1**	**29.0**	**29.5**	**31.7**	**33.0**	**39.2**	**41.7**	**45.2**	**47.0**	**52.4**	**60.9**

Source: BC STATS and Statistics Canada

Detailed Table 9 (ctd). Employment by Industry, British Columbia, 1990-2000

	% change from previous year									
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Primary & Goods Producing Industries (excluding agriculture & fishing)	**-9.0**	**-2.0**	**1.6**	**3.0**	**-0.9**	**1.1**	**3.0**	**-0.2**	**-0.4**	**3.1**
Agriculture & Related	na	na	na	na	na	na	na	na	na	na
Agriculture	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*
Food (excl. fish products)	*-0.8*	*-5.2*	*-5.2*	*9.2*	*-5.8*	*10.7*	*8.3*	*2.0*	*-7.0*	*8.6*
Beverages	*-16.5*	*-0.3*	*-6.3*	*28.1*	*-0.5*	*-20.8*	*22.8*	*5.3*	*4.1*	*4.8*
Fishing & Related	na	na	na	na	na	na	na	na	na	na
Fishing	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*
Fish Products	*-1.7*	*1.9*	*2.7*	*11.9*	*-26.8*	*8.0*	*0.7*	*-4.4*	*-14.7*	*-2.5*
Forestry & Related	-4.2	-5.3	2.6	6.8	-1.8	0.5	-1.7	-5.0	4.1	5.6
Logging & Forestry	*9.3*	*-3.7*	*10.1*	*6.1*	*3.4*	*-0.7*	*-1.5*	*-5.4*	*4.2*	*7.0*
Paper & Allied Products	*-6.3*	*-11.4*	*0.9*	*-3.7*	*1.5*	*-9.4*	*-10.7*	*1.3*	*6.5*	*4.5*
Wood Manufacturing	*-10.1*	*-3.1*	*-1.3*	*12.3*	*-6.7*	*6.0*	*1.8*	*-6.9*	*3.2*	*5.1*
Mining & Related	-14.1	-7.8	0.4	5.7	5.1	-4.1	4.7	1.4	-6.3	5.5
Other Manufacturing	-16.1	-2.4	1.9	-1.3	-0.4	2.2	6.7	5.9	3.7	5.6
Construction	-9.3	4.8	0.8	-1.6	-0.1	2.5	4.3	-2.6	-5.4	3.6
Utilities	11.0	6.1	13.7	1.3	-3.6	1.4	-3.3	10.5	7.2	3.8
Service Producing Industries	**0.1**	**0.5**	**5.0**	**2.1**	**5.0**	**1.1**	**2.2**	**1.2**	**0.2**	**3.9**
Transportation, Storage & Communication	1.7	-9.7	2.5	7.5	5.7	-10.5	1.1	0.0	-0.5	1.2
Retail & Wholesale Trade	-1.8	0.3	3.4	-2.6	5.3	0.7	1.8	1.1	0.4	4.8
Finance, Insurance & Real Estate	4.5	1.3	10.1	-3.7	1.0	-3.1	4.5	1.0	-2.0	2.7
Educational & Related	1.7	1.3	7.9	1.0	6.9	7.3	0.7	0.8	1.2	2.5
Health & Social	5.3	2.6	-1.4	8.0	4.4	2.4	0.4	3.4	2.4	2.8
Accommodation, Food & Beverage	-4.4	3.6	17.9	-1.1	1.6	3.9	4.0	1.3	-0.7	2.3
Amusement & Recreation	23.4	9.3	4.2	16.4	4.0	4.9	-1.7	-4.5	-8.6	8.6
Business, Personal & Other	-7.7	2.6	2.3	8.7	12.5	4.0	6.2	1.8	2.3	9.0
Government	3.9	0.4	1.7	-0.2	-1.3	0.1	-1.1	0.0	-2.6	-0.9
BC Industrial Aggregate (excluding agriculture & fishing)	**-2.0**	**0.0**	**4.3**	**2.3**	**3.7**	**1.1**	**2.4**	**0.9**	**0.1**	**4.1**
High Technology Sector Total	**7.0**	**1.7**	**7.5**	**4.1**	**18.7**	**6.2**	**8.6**	**4.0**	**11.4**	**16.2**

Source: BC STATS and Statistics Canada

Detailed Table 10. High Technology Sector Employment, by Province, 1990-2000

Province	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Canada	361,200	345,340	332,980	332,070	343,190	371,240	400,270	433,870	467,570	499,700	552,080
British Columbia	27,130	29,030	29,520	31,730	33,030	39,210	41,650	45,230	47,040	52,390	60,890
Alberta	26,400	26,000	24,980	25,250	32,620	29,370	37,660	44,460	50,240	50,710	59,310
Ontario	187,730	171,670	158,760	158,960	166,380	180,050	187,290	199,380	212,550	229,090	251,420
Quebec	90,920	90,560	91,590	87,610	86,930	94,670	106,730	113,360	122,320	129,020	139,310

	% change from previous year									
Province	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Canada	-4.4	-3.6	-0.3	3.3	8.2	7.8	8.4	7.8	6.9	10.5
British Columbia	7.0	1.7	7.5	4.1	18.7	6.2	8.6	4.0	11.4	16.2
Alberta	-1.5	-3.9	1.1	29.2	-10.0	28.2	18.1	13.0	0.9	17.0
Ontario	-8.6	-7.5	0.1	4.7	8.2	4.0	6.5	6.6	7.8	9.7
Quebec	-0.4	1.1	-4.3	-0.8	8.9	12.7	6.2	7.9	5.5	8.0

Source: BC STATS and Statistics Canada

Detailed Table 11. High Technology Sector Wages and Salaries, 1990-2000

Value ($ million)

SIC	INDUSTRY	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Manufacturing Industries		**221.9**	**199.3**	**226.2**	**253.6**	**248.2**	**266.1**	**324.7**	**397.7**	**426.6**	**558.9**	**668.1**
3211	Aircraft and Aircraft Parts Industry	20.4	20.7	21.3	32.1	28.9	30.4	42.7	48.0	42.5	67.3	91.7
335	Communication and Other Electronic Equipment	63.6	53.6	76.5	71.4	77.8	85.3	105.0	123.1	148.5	241.9	261.9
336	Office, Store and Business Machines	29.7	34.5	37.7	43.3	46.9	55.4	62.6	80.0	81.7	88.6	136.4
3372	Electrical Switchgear and Protective Equipment	15.0	11.0	9.7	9.8	9.2	8.3	8.9	15.0	16.2	20.5	24.5
3379	Other Electrical Industrial Equipment Industries	11.7	10.0	11.7	11.4	8.9	12.5	16.7	28.1	27.5	34.8	41.6
3911	Indicating, Recording and Controlling Instruments Industry	16.6	11.4	17.4	22.1	15.3	13.9	23.9	24.4	25.0	24.7	24.0
3912	Other Instruments and Related Products Industry	15.8	14.7	14.5	18.7	14.7	15.4	21.3	19.6	18.0	17.7	17.2
3192	Construction, Mining Machinery & Materials Handling Equipment	9.5	8.4	6.4	9.2	10.2	12.0	12.3	13.0	13.3	12.0	14.8
3194	Turbine and Mechanical Power Transmission Equipment	0.8	0.8	0.6	0.9	1.0	1.1	1.2	1.3	1.6	1.5	1.8
3199	Other Machinery and Equipment Industries N.E.C.	2.1	1.6	1.2	1.6	1.8	1.8	2.4	2.4	2.5	2.3	2.8
37grp	Chemical and Chemical Products group	17.5	16.9	14.4	17.7	21.9	18.5	18.3	30.6	36.4	32.9	35.7
3grp	Other Manufacturing Group	19.1	15.7	14.8	15.4	11.6	11.7	9.4	12.4	13.4	14.9	15.6
Service Industries[1]		**688.2**	**841.2**	**862.7**	**934.3**	**1,008.5**	**1,377.3**	**1,454.7**	**1,603.6**	**1,646.7**	**1,809.9**	**2,142.5**
772	Computer and related services	150.1	269.4	366.8	387.7	382.6	403.1	481.6	572.4	627.0	774.4	1,011.6
7752	Engineering services	367.8	355.2	302.5	330.0	362.0	588.9	502.7	536.4	527.1	528.7	574.9
7759	Scientific and Technical Services	119.1	137.1	125.9	144.8	196.3	300.2	380.0	405.6	398.5	399.8	434.6
868	Medical and other Health Laboratories	51.2	79.5	67.5	71.8	67.6	85.2	90.4	89.3	94.1	107.0	121.4
High Technology Sector Total		**910.1**	**1,040.6**	**1,088.9**	**1,187.9**	**1,256.7**	**1,643.4**	**1,779.4**	**2,001.3**	**2,073.3**	**2,368.9**	**2,810.6**
BC Industrial Aggregate		**34,222.9**	**34,830.5**	**35,739.2**	**38,105.1**	**40,348.6**	**43,071.3**	**44,492.1**	**46,038.5**	**46,786.0**	**47,304.4**	**50,160.9**

1. Wages and Salaries data are not available at the four-digit level for SICs 7752 and 7759. A ratio was applied to the wages and salaries value for SIC 775 in order to divide it between SICs 7752 and 7759. This is why the two industries have the same growth rate.

Source: BC STATS and Statistics Canada

Detailed Table 11 (ctd). High Technology Sector Wages and Salaries, 1990-2000

SIC	INDUSTRY	% change from previous year									
		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Manufacturing Industries		**-10.2**	**13.5**	**12.1**	**-2.2**	**7.3**	**22.0**	**22.5**	**7.3**	**31.0**	**19.5**
3211	Aircraft and Aircraft Parts Industry	1.4	3.2	50.6	-10.2	5.3	40.6	12.3	-11.3	58.2	36.2
335	Communication and Other Electronic Equipment	-15.8	42.8	-6.7	8.9	9.7	23.0	17.2	20.6	62.9	8.3
336	Office, Store and Business Machines	16.2	9.3	14.7	8.3	18.1	13.1	27.7	2.2	8.5	53.9
3372	Electrical Switchgear and Protective Equipment	-26.7	-11.3	0.8	-5.8	-10.4	7.8	68.0	8.0	26.5	19.5
3379	Other Electrical Industrial Equipment Industries	-15.1	17.2	-2.6	-21.5	39.4	34.0	68.3	-1.9	26.5	19.5
3911	Indicating, Recording and Controlling Instruments Industry	-31.1	51.6	27.5	-31.0	-9.2	72.5	2.2	2.2	-1.3	-2.8
3912	Other Instruments and Related Products Industry	-7.0	-1.6	29.1	-21.1	4.5	38.2	-8.1	-8.2	-1.3	-2.8
3192	Construction, Mining Machinery & Materials Handling Equipment	-11.6	-24.1	43.8	11.1	17.8	2.7	5.5	2.2	-9.6	23.6
3194	Turbine and Mechanical Power Transmission Equipment	-1.6	-28.0	51.3	16.1	4.4	7.2	16.4	21.4	-9.6	23.6
3199	Other Machinery and Equipment Industries	-23.7	-27.2	41.1	8.1	0.9	35.3	-1.5	5.7	-9.6	23.6
37grp	Chemical and Chemical Products Group	-3.8	-14.3	22.5	23.8	-15.5	-1.0	66.7	19.1	-9.7	8.6
3grp	Other Manufacturing Group	-17.6	-6.1	4.2	-24.8	1.0	-20.0	32.0	8.4	10.8	4.9
Service Industries[1]		**22.2**	**2.6**	**8.3**	**7.9**	**36.6**	**5.6**	**10.2**	**2.7**	**9.9**	**18.4**
772	Computer and related services	79.5	36.1	5.7	-1.3	5.3	19.5	18.9	9.5	23.5	30.6
7752	Engineering services	-3.4	-14.8	9.1	9.7	62.7	-14.6	6.7	-1.7	0.3	8.7
7759	Scientific and Technical Services	15.1	-8.1	15.0	35.6	52.9	26.6	6.7	-1.7	0.3	8.7
868	Medical and other Health Laboratories	55.4	-15.1	6.4	-5.8	25.9	6.2	-1.3	5.4	13.7	13.4
High Technology Sector Total		**14.3**	**4.6**	**9.1**	**5.8**	**30.8**	**8.3**	**12.5**	**3.6**	**14.3**	**18.6**
BC Industrial Aggregate		**1.8**	**2.6**	**6.6**	**5.9**	**6.7**	**3.3**	**3.5**	**1.6**	**1.1**	**6.0**

1. Wages and Salaries data are not available at the four-digit level for SICs 7752 and 7759. A ratio was applied to the wages and salaries value for SIC 775 in order to divide it between SICs 7752 and 7759. This is why the two industries have the same growth rate.

Source: BC STATS and Statistics Canada

Detailed Table 12. High Technology Sector Average Weekly Earnings,[1] 1990-2000

Dollars per employee per week (including overtime)

SIC	INDUSTRY	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Manufacturing Industries		**610**	**630**	**650**	**670**	**700**	**700**	**770**	**800**	**830**	**870**	**900**
3211	Aircraft and Aircraft Parts Industry	660	690	740	730	680	740	800	790	810	830	890
335	Communication and Other Electronic Equipment	640	630	700	690	770	680	770	790	830	890	890
336	Office, Store and Business Machines	530	600	560	610	640	710	830	900	970	1,040	1,080
3372	Electrical Switchgear and Protective Equipment	800	780	790	820	860	860	810	870	970	1,030	1,060
3379	Other Electrical Industrial Equipment Industries	800	780	790	820	860	860	810	870	970	1,030	1,060
3911	Indicating, Recording and Controlling Instruments Industry	480	490	530	580	590	550	640	620	630	620	620
3912	Other Instruments and Related Products Industry	480	490	530	580	590	550	640	620	630	620	620
3192	Construction, Mining Machinery & Materials Handling Equipment	650	700	770	760	790	830	900	880	930	830	890
3194	Turbine and Mechanical Power Transmission Equipment	650	700	770	760	790	830	900	880	930	830	890
3199	Other Machinery and Equipment Industries N.E.C.	650	700	770	760	790	830	900	880	930	830	890
37grp	Chemical and Chemical Products group	640	690	740	760	730	770	740	810	810	730	740
3grp	Other Manufacturing Group	600	630	650	690	720	720	750	810	730	740	750
Service Industries		**660**	**710**	**730**	**730**	**740**	**830**	**830**	**860**	**850**	**870**	**880**
772	Computer and related services	540	650	690	760	750	820	830	880	880	900	930
7752	Engineering services	740	770	800	750	750	870	870	880	860	880	880
7759	Scientific and Technical Services	740	770	800	750	750	870	870	880	860	880	880
868	Medical and other Health Laboratories	460	560	550	570	590	620	600	650	640	640	630
High Technology Sector Total		**650**	**690**	**710**	**720**	**730**	**810**	**820**	**850**	**850**	**870**	**890**
BC Industrial Aggregate		**510**	**530**	**550**	**560**	**580**	**590**	**610**	**610**	**620**	**620**	**640**

1. Wages and Salaries data are not available at the four-digit level for many of the industries shown. Larger industry aggregations are used to calculate average weekly earnings, thus explaining why some similar industries have the same growth rate.

Source: BC STATS and Statistics Canada

Detailed Table 12 (ctd). High Technology Sector Average Weekly Earnings,[1] 1990-2000

SIC	INDUSTRY	% change from previous year									
		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Manufacturing Industries		**3.4**	**4.0**	**3.3**	**4.3**	**-0.8**	**10.0**	**3.8**	**4.4**	**4.4**	**3.3**
3211	Aircraft and Aircraft Parts Industry	5.0	8.0	-1.9	-6.6	8.7	8.7	-1.8	2.8	2.5	7.3
335	Communication and Other Electronic Equipment	-1.6	10.0	-1.5	11.5	-11.7	13.5	2.4	5.1	8.0	-0.3
336	Office, Store and Business Machines	13.9	-6.8	9.5	4.0	11.2	17.1	8.4	8.2	7.1	3.4
3372	Electrical Switchgear and Protective Equipment	-1.8	1.5	3.0	5.3	0.2	-5.9	7.3	11.8	6.3	2.9
3379	Other Electrical Industrial Equipment Industries	-1.8	1.5	3.0	5.3	0.2	-5.9	7.3	11.8	6.3	2.9
3911	Indicating, Recording and Controlling Instruments Industry	1.4	8.0	10.1	1.0	-6.5	16.6	-2.5	0.5	-0.2	-1.2
3912	Other Instruments and Related Products Industry	1.4	8.0	10.1	1.0	-6.5	16.6	-2.5	0.5	-0.2	-1.2
3192	Construction, Mining Machinery & Materials Handling Equipment	7.4	9.6	-0.8	3.4	5.4	8.2	-2.9	6.0	-11.1	8.1
3194	Turbine and Mechanical Power Transmission Equipment	7.4	9.6	-0.8	3.4	5.4	8.2	-2.9	6.0	-11.1	8.1
3199	Other Machinery and Equipment Industries	7.4	9.6	-0.8	3.4	5.4	8.2	-2.9	6.0	-11.1	8.1
37grp	Chemical and Chemical Products Group	7.8	6.1	3.8	-5.0	6.1	-3.4	9.4	-0.9	-8.8	1.2
3grp	Other Manufacturing Group	5.1	3.1	5.8	4.3	-0.2	4.3	7.6	-9.6	1.2	2.3
Service Industries		**7.2**	**2.8**	**1.1**	**0.7**	**12.4**	**0.5**	**3.7**	**-1.6**	**2.1**	**1.7**
772	Computer and related services	22.2	6.1	9.0	-0.7	8.6	1.2	6.6	-0.1	2.1	3.6
7752	Engineering services	3.5	3.6	-6.3	0.8	15.0	1.0	1.0	-2.5	2.4	0.2
7759	Scientific and Technical Services	3.5	3.6	-6.3	0.8	15.0	1.0	1.0	-2.5	2.4	0.2
868	Medical and other Health Laboratories	21.8	-2.9	4.2	3.6	5.1	-3.0	8.5	-1.2	0.0	-2.4
High Technology Sector Total		**6.8**	**2.9**	**1.5**	**1.6**	**10.2**	**1.9**	**3.6**	**-0.4**	**2.6**	**2.1**
BC Industrial Aggregate		**3.9**	**2.7**	**2.2**	**3.5**	**2.9**	**2.2**	**1.1**	**0.7**	**1.0**	**1.9**

1. Wages and Salaries data are not available at the four-digit level for many of the industries shown. Larger industry aggregations are used to calculate average weekly earnings, thus explaining why some similar industries have the same growth rate.

Source: BC STATS and Statistics Canada

Detailed Table 13. High Technology Sector Establishments,[1] by Development Region and Regional District, 1995-2000

Development Region / Regional District	1995			1996			1997			1998			1999			2000		
	Mfg	Service	Total	Mfg	Service	Total	Mfg	Service	Total	Mfg	Service	Total	Mfg	Service	Total	Mfg	Service	Total
Vancouver Island/Coast	**138**	**695**	**833**	**144**	**761**	**905**	**175**	**880**	**1,055**	**185**	**975**	**1,160**	**187**	**1,086**	**1,273**	**192**	**1,171**	**1,363**
23 Alberni-Clayoquot	2	16	18	3	21	24	6	20	26	7	23	30	8	23	31	10	19	29
17 Capital	79	456	535	84	470	554	98	541	639	93	616	709	91	674	765	86	734	820
45 Central Coast	10	1	11	1	2	3	1	2	3	2	1	3	1	1	2	1	-	1
25 Comox-Strathcona	18	54	72	21	66	87	26	85	111	33	84	117	33	89	122	33	109	142
19 Cowichan Valley	11	37	48	8	43	51	8	51	59	11	61	72	16	81	97	21	89	110
43 Mount Waddington	1	2	3	1	3	4	3	6	9	3	11	14	3	12	15	2	14	16
21 Nanaimo	23	121	144	22	142	164	26	161	187	32	164	196	30	187	217	34	188	222
27 Powell River	3	8	11	4	14	18	7	14	21	4	15	19	5	19	24	5	18	23
Mainland/Southwest	**942**	**2,469**	**3,411**	**971**	**2,835**	**3,806**	**1,009**	**3,096**	**4,105**	**992**	**3,439**	**4,431**	**1,024**	**3,712**	**4,736**	**1,000**	**4,048**	**5,048**
09 Fraser Valley	59	120	179	59	128	187	50	103	153	66	114	180	66	133	199	62	137	199
15 Greater Vancouver	877	2,300	3,177	904	2,650	3,554	949	2,926	3,875	908	3,263	4,171	937	3,512	4,449	918	3,834	4,752
31 Squamish-Lillooet	2	29	31	2	33	35	6	38	44	10	36	46	12	37	49	11	45	56
29 Sunshine Coast	4	20	24	6	24	30	4	29	33	8	26	34	9	30	39	9	32	41
Thompson/Okanagan	**97**	**369**	**466**	**108**	**429**	**537**	**127**	**483**	**610**	**136**	**496**	**632**	**151**	**514**	**665**	**142**	**522**	**664**
35 Central Okanagan	35	138	173	40	168	208	44	169	213	48	172	220	62	172	234	62	195	257
39 Columbia-Shuswap	3	30	33	5	39	44	9	49	58	7	60	67	9	62	71	10	53	63
37 North Okanagan	20	52	72	20	65	85	24	77	101	26	75	101	25	77	102	25	80	105
07 Okanagan-Similkameen	14	48	62	16	48	64	17	57	74	18	58	76	19	67	86	15	57	72
33 Thompson-Nicola	25	101	126	27	109	136	33	131	164	37	131	168	36	136	172	30	137	167
Kootenay	**20**	**109**	**129**	**23**	**121**	**144**	**40**	**129**	**169**	**36**	**142**	**178**	**40**	**159**	**199**	**44**	**165**	**209**
03 Central Kootenay	7	48	55	12	53	65	22	63	85	15	62	77	18	72	90	22	78	100
01 East Kootenay	10	43	53	8	49	57	13	46	59	11	51	62	12	58	70	12	58	70
05 Kootenay Boundary	3	18	21	3	19	22	5	20	25	10	29	39	10	29	39	10	29	39
Cariboo	**26**	**116**	**142**	**27**	**133**	**160**	**29**	**164**	**193**	**39**	**178**	**217**	**49**	**198**	**247**	**46**	**209**	**255**
41 Cariboo	9	27	36	10	36	46	10	47	57	12	55	67	16	60	76	12	62	74
53 Fraser-Ft.George	17	89	106	17	97	114	19	117	136	27	123	150	33	138	171	34	147	181
North Coast	**7**	**26**	**33**	**10**	**41**	**51**	**9**	**47**	**56**	**13**	**48**	**61**	**15**	**46**	**61**	**12**	**47**	**59**
49 Kitimat-Stikine	2	17	19	5	32	37	5	33	38	8	32	40	9	31	40	7	35	42
47 Skeena-Queen Charlotte	5	9	14	5	9	14	4	14	18	5	16	21	6	15	21	5	12	17
Nechako	**1**	**22**	**23**	**3**	**34**	**37**	**3**	**42**	**45**	**9**	**43**	**52**	**11**	**46**	**57**	**11**	**55**	**66**
51 Bulkley-Nechako	1	22	23	3	34	37	3	42	45	9	43	52	11	46	57	11	54	65
57 Stikine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Northeast	**6**	**69**	**75**	**7**	**78**	**85**	**8**	**86**	**94**	**12**	**94**	**106**	**10**	**95**	**105**	**16**	**106**	**122**
55 Peace River	6	65	71	7	71	78	8	84	92	12	90	102	10	92	102	15	103	118
59 Northern Rockies	-	4	4	-	7	7	-	2	2	-	4	4	-	3	3	1	3	4
Total	**1,238**	**3,878**	**5,116**	**1,294**	**4,434**	**5,728**	**1,402**	**4,930**	**6,332**	**1,422**	**5,421**	**6,843**	**1,488**	**5,861**	**7,349**	**1,463**	**6,323**	**7,786**

1. Establishments with zero employees are not included in these figures.
Figures do not add to totals because some establishments did not have geographic codes.

Source: BC STATS and Statistics Canada

Detailed Table 14. High Technology Sector Establishments,[1] by Industry, 1994-2000

SIC	INDUSTRY	1994	1995	1996	1997	1998	1999	2000
Manufacturing Industries		**1,178**	**1,238**	**1,294**	**1,402**	**1,422**	**1,488**	**1,463**
3211	Aircraft and Aircraft Parts Industry	49	47	50	50	58	58	56
335	Communication and Other Electronic Equipment	143	153	148	148	136	148	143
336	Office, Store and Business Machines	73	74	71	65	58	62	60
3372	Electrical Switchgear and Protective Equipment	15	20	19	21	23	23	22
3379	Other Electrical Industrial Equipment Industries	34	32	33	34	27	25	31
3911	Indicating, Recording & Controlling Instruments Industry	34	35	40	43	45	50	55
3912	Other Instruments & Related Products Industry	50	53	61	76	80	77	77
3192	Construction, Mining Machinery & Materials Handling	110	108	117	159	168	182	167
3194	Turbine & Mechanical Power Transmission Equipment	22	24	23	21	24	27	23
3199	Other Machinery and Equipment Industries N.E.C.	153	161	179	171	172	185	193
3999	Other Manufactured Products Industry	388	420	432	456	434	437	431
37grp	Chemical and Chemical Products Group	58	58	65	79	84	93	88
3grp	Other Manufacturing Group	49	53	56	79	113	121	117
Service Industries		**3,534**	**3,878**	**4,434**	**4,930**	**5,421**	**5,861**	**6,323**
772	Computer and related services	1,279	1,365	1,620	1,860	2,078	2,297	2,702
7752	Engineering services	1,376	1,546	1,683	1,886	1,926	1,939	1,913
7759	Scientific and Technical Services	736	824	954	1,005	1,205	1,333	1,500
868	Medical and other Health Laboratories	143	143	177	179	212	292	208
High Technology Sector		**4,712**	**5,116**	**5,728**	**6,332**	**6,843**	**7,349**	**7,786**

1. Establishments with zero employees are not included in these figures.

Source: BC STATS, Statistics Canada Business Register Division.

Detailed Table 14. (ctd.) High Technology Sector Establishments,[1] by Industry, 1994-2000

		%change from previous year					
SIC	**INDUSTRY**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
Manufacturing Industries		**5.1**	**4.5**	**8.3**	**1.4**	**4.6**	**-1.7**
3211	Aircraft and Aircraft Parts Industry	-4.1	6.4	0.0	16.0	0.0	-3.4
335	Communication and Other Electronic Equipment	7.0	-3.3	0.0	-8.1	8.8	-3.4
336	Office, Store and Business Machines	1.4	-4.1	-8.5	-10.8	6.9	-3.2
3372	Electrical Switchgear and Protective Equipment	33.3	-5.0	10.5	9.5	0.0	-4.3
3379	Other Electrical Industrial Equipment Industries	-5.9	3.1	3.0	-20.6	-7.4	24.0
3911	Indicating, Recording & Controlling Instruments Industry	2.9	14.3	7.5	4.7	11.1	10.0
3912	Other Instruments & Related Products Industry	6.0	15.1	24.6	5.3	-3.8	0.0
3192	Construction, Mining Machinery & Materials Handling	-1.8	8.3	35.9	5.7	8.3	-8.2
3194	Turbine & Mechanical Power Transmission Equipment	9.1	-4.2	-8.7	14.3	12.5	-14.8
3199	Other Machinery and Equipment Industries N.E.C.	5.2	11.2	-4.5	0.6	7.6	4.3
3999	Other Manufactured Products Industry	0.1	0.0	0.1	-0.1	0.0	-1.4
37grp	Chemical and Chemical Products Group	0.0	12.1	21.5	6.3	10.7	-5.4
3grp	Other Manufacturing Group	0.1	0.1	0.4	0.4	0.1	-3.3
Service Industries		**9.7**	**14.3**	**11.2**	**10.0**	**8.1**	**7.9**
772	Computer and related services	6.7	18.7	14.8	11.7	10.5	17.6
7752	Engineering services	12.4	8.9	12.1	2.1	0.7	-1.3
7759	Scientific and Technical Services	12.0	15.8	5.3	19.9	10.6	12.5
868	Medical and other Health Laboratories	0.0	23.8	1.1	18.4	37.7	-28.8
High Technology Sector		**8.6**	**12.0**	**10.5**	**8.1**	**7.4**	**5.9**

1. Establishments with zero employees are not included in these figures.

Source: BC STATS, Statistics Canada Business Register Division.

Detailed Table 15. High Technology Sector Establishments, by Industry and Establishment Size, 2000

		Number of establishments, by number of employees							
SIC	**INDUSTRY**	**1 to 4**	**5 to 9**	**10 to 19**	**20 to 49**	**50 plus**	**Sub-Total**	**None**	**Total**
Manufacturing Industries		**780**	**205**	**179**	**178**	**121**	**1,463**	**790**	**2,253**
3211	Aircraft and Aircraft Parts Industry	31	7	6	6	6	56	37	93
335	Communication and Other Electronic Equipment	61	19	19	20	24	143	80	223
336	Office, Store and Business Machines	33	7	3	7	10	60	32	92
3372	Electrical Switchgear and Protective Equipment	6	7	5	3	1	22	2	24
3379	Other Electrical Industrial Equipment Industries	13	6	4	2	6	31	12	43
3911	Indicating, Recording & Controlling Instruments Industry	26	4	7	11	7	55	20	75
3912	Other Instruments & Related Products Industry	38	9	6	14	10	77	47	124
3192	Construction, Mining Machinery & Materials Handling	82	20	30	20	15	167	69	236
3194	Turbine & Mechanical Power Transmission Equipment	7	3	7	3	3	23	8	31
3199	Other Machinery and Equipment Industries N.E.C.	113	26	20	25	9	193	150	343
3999	Other Manufactured Products Industry	267	72	47	34	11	431	212	643
37grp	Chemical and Chemical Products Group	35	14	13	20	6	88	35	123
3grp	Other Manufacturing Group	68	11	12	13	13	117	86	203
Service Industries		**4,167**	**857**	**611**	**425**	**263**	**6,323**	**5,965**	**12,288**
772	Computer and related services	1,772	347	249	198	136	2,702	2,780	5,482
7752	Engineering services	1,247	269	204	127	66	1,913	1,734	3,647
7759	Scientific and Technical Services	1,038	189	136	88	49	1,500	1,409	2,909
868	Medical and other Health Laboratories	110	52	22	12	12	208	42	250
High Technology Sector		**4,947**	**1,062**	**790**	**603**	**384**	**7,786**	**6,755**	**14,541**
Total, all industries		**90,751**	**27,389**	**19,075**	**12,884**	**7,272**	**157,371**	**132,461**	**289,832**

Source: BC STATS, Statistics Canada Business Register Division.

6 DETAILED TABLES II
International Trade in High Technology Goods and Services

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Detailed Table 16. Shipments and Exports of BC High Technology Goods and Total Processed Goods, 1990-2000

Value ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
High Technology Goods											
Shipments[1]	741.4	680.3	859.5	850.6	1,012.4	1,240.0	1,514.4	1,617.6	1,758.3	1,592.1	1,766.1
Exports	269.8	267.4	446.3	496.9	519.8	562.7	511.9	609.7	770.1	818.1	946.8
Exports as % of Shipments	36.4	39.3	51.9	58.4	51.3	45.4	33.8	37.7	43.8	51.4	53.6
Total Processed Goods											
Shipments[1]	25,329	23,259	24,839	27,143	31,048	35,040	34,096	34,583	33,890	36,994	38,450
Exports of Processed Goods[2]	13,123	11,957	13,457	16,130	19,553	23,223	21,757	22,277	21,401	24,160	25,403
Export Orientation (%)	51.8	51.4	54.2	59.4	63.0	66.3	63.8	64.4	63.1	65.3	66.1

% change from previous year

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
High Technology Goods										
Shipments	-8.2	26.3	-1.0	19.0	22.5	22.1	6.8	8.7	-9.5	10.9
Exports	-0.9	66.9	11.3	4.6	8.3	-9.0	19.1	26.3	6.2	15.7
Total Processed Goods										
Shipments	-8.2	6.8	9.3	14.4	12.9	-2.7	1.4	-2.0	9.2	3.9
Exports of Processed Goods	-8.9	12.5	19.9	21.2	18.8	-6.3	2.4	-3.9	12.9	5.1

1. Shipments represent revenues from all production, sales, services and related activities in the manufacturing sector.
2. "Processed goods" excludes selected agricultural, fish, logging, mining and energy products not produced by BC manufacturing industries.

Source: BC STATS and Statistics Canada

Detailed Table 17. Exports of High Technology Goods, by Destination and Mode of Transport, 1990-2000

Destination	Mode of Transport[2]	Value ($ million)[1] 1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
United States	Land	138.1	156.5	282.2	283.8	269.3	251.3	212.9	276.0	436.2	454.0	516.8
	Sea	0.3	0.1	0.1	0.1	0.6	1.9	1.8	4.2	3.8	5.6	1.6
	Air	29.9	28.2	44.9	58.0	97.8	146.8	133.8	144.6	174.7	221.6	279.3
	Total	**168.3**	**184.8**	**327.3**	**342.9**	**367.7**	**399.9**	**348.8**	**424.8**	**614.8**	**681.3**	**797.7**
Pacific Rim (total)	Land	3.6	1.9	4.8	16.9	5.6	10.5	9.5	17.0	8.6	7.6	0.6
	Sea	5.8	8.8	16.4	21.7	19.3	9.6	16.8	18.0	14.7	8.0	17.4
	Air	29.1	30.5	43.4	50.0	61.9	81.0	83.6	82.9	76.1	54.8	45.7
	Total	**38.6**	**41.2**	**64.6**	**88.5**	**86.8**	**101.2**	**109.9**	**117.8**	**99.4**	**70.4**	**63.7**
Japan	*Land*	0.1	1.0	3.2	1.7	1.5	2.6	0.5	1.7	0.1	0.5	0.2
	Sea	1.2	0.1	1.3	1.3	1.8	2.1	2.5	2.5	2.1	1.2	4.5
	Air	11.3	8.8	9.4	9.7	11.3	23.5	8.8	9.9	3.4	5.8	24.2
	Total	**12.6**	**10.9**	**13.9**	**12.8**	**14.6**	**28.2**	**11.8**	**14.1**	**5.6**	**7.5**	**28.9**
Pacific Rim (excluding Japan)	*Land*	3.6	0.9	1.6	15.1	4.0	8.0	8.9	15.3	8.6	7.1	0.4
	Sea	4.6	8.7	15.1	20.3	17.6	7.5	14.3	15.4	12.6	6.8	12.9
	Air	17.8	21.6	34.0	40.2	50.6	57.5	74.8	73.0	72.7	49.0	21.5
	Total	**26.0**	**30.3**	**50.7**	**75.7**	**72.2**	**73.0**	**98.0**	**103.7**	**93.9**	**62.9**	**34.8**
European Union	Land	14.1	0.3	0.2	0.3	0.6	2.6	0.7	1.9	4.5	0.5	1.1
	Sea	3.9	2.0	2.5	10.8	5.3	1.2	3.7	2.6	3.0	7.4	5.9
	Air	24.8	19.3	22.2	22.5	29.7	35.6	19.9	28.0	29.0	29.6	47.7
	Total	**42.9**	**21.7**	**24.9**	**33.5**	**35.6**	**39.4**	**24.2**	**32.5**	**36.4**	**37.5**	**54.8**
All Other Countries	Land	2.5	3.0	2.1	3.7	2.0	2.0	2.2	2.9	1.4	3.5	3.2
	Sea	4.9	1.7	8.9	12.2	5.6	3.2	5.5	18.3	3.4	3.4	7.6
	Air	12.7	15.0	18.4	16.0	22.2	17.0	21.4	13.4	14.6	22.2	19.9
	Total	**20.0**	**19.7**	**29.5**	**32.0**	**29.7**	**22.2**	**29.1**	**34.6**	**19.4**	**29.0**	**30.6**
Total	Land	158.3	161.7	289.4	304.7	277.4	266.4	225.3	297.8	450.7	465.6	521.7
	Sea	15.0	12.7	27.9	44.8	30.8	15.8	27.8	43.0	25.0	24.4	32.5
	Air	96.6	93.0	128.9	146.4	211.6	280.5	258.7	268.8	294.4	328.1	392.6
	Total	**269.8**	**267.4**	**446.3**	**496.9**	**519.8**	**562.7**	**511.9**	**609.7**	**770.1**	**818.1**	**946.8**

1. Totals may not equal the sum of Land Sea and Air due to the fact that some respondents did not fill in the survey completely.
2. Shipments by land to overseas markets represent the export of BC produced high technology products transshipped by US Ports such as Seattle or Portland.

Source: BC STATS and Statistics Canada

Detailed Table 17 (ctd). Exports of High Technology Goods, by Destination and Mode of Transport, 1990-2000

		% of Exports to Destination[1]										
Destination	**Mode of Transport[2]**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
United States	Land	82.0	84.7	86.2	82.8	73.2	62.8	61.1	65.0	71.0	66.6	64.8
	Sea	0.2	0.1	0.0	0.0	0.2	0.5	0.5	1.0	0.6	0.8	0.2
	Air	17.8	15.2	13.7	16.9	26.6	36.7	38.4	34.0	28.4	32.5	35.0
Pacific Rim (total)	Land	9.4	4.7	7.4	19.1	6.4	10.4	8.6	14.4	8.7	10.8	0.9
	Sea	15.1	21.4	25.4	24.5	22.3	9.5	15.3	15.2	14.8	11.4	27.4
	Air	75.5	73.9	67.2	56.5	71.3	80.1	76.1	70.4	76.5	77.8	71.7
Japan	*Land*	0.5	8.9	22.8	13.6	10.5	9.1	4.6	12.0	1.5	6.5	0.7
	Sea	9.8	1.1	9.6	10.4	12.2	7.5	20.9	17.8	37.5	16.1	15.6
	Air	89.7	80.8	67.6	76.0	77.3	83.4	74.6	70.1	61.0	77.4	83.7
Pacific Rim (excluding Japan)	*Land*	13.7	3.1	3.2	20.0	5.6	10.9	9.1	14.7	9.1	11.3	1.1
	Sea	17.7	28.8	29.7	26.9	24.3	10.3	14.6	14.9	13.5	10.8	37.2
	Air	68.5	71.4	67.0	53.2	70.1	78.8	76.3	70.4	77.4	77.9	61.7
European Union	Land	32.9	1.5	0.9	0.9	1.7	6.6	2.7	5.9	12.2	1.3	2.1
	Sea	9.2	9.4	10.1	32.1	14.9	3.0	15.3	8.0	8.3	19.8	10.8
	Air	57.8	89.1	89.0	67.1	83.4	90.4	82.0	86.1	79.5	78.9	87.2
All Other Countries	Land	12.5	15.2	64.9	11.7	6.6	9.0	7.6	8.5	7.1	12.0	10.4
	Sea	24.3	8.5	6.3	38.3	18.7	14.3	18.9	52.9	17.6	11.6	24.8
	Air	63.3	76.3	28.9	50.0	74.7	76.8	73.4	38.6	75.2	76.4	64.8
Total	Land	58.7	60.5	64.9	61.3	53.4	47.3	44.0	48.8	58.5	56.9	55.1
	Sea	5.5	4.7	6.3	9.0	5.9	2.8	5.4	7.1	3.2	3.0	3.4
	Air	35.8	34.8	28.9	29.5	40.7	49.8	50.5	44.1	38.2	40.1	41.5

1. Percentages may not add to 100 due to rounding.
2. Shipments by land to overseas markets represent the export of BC produced high technology commodities to non-domestic points of departure such as the Port of Seattle.

Source: BC STATS and Statistics Canada

Detailed Table 18. Top 25 High Technology Export Commodities, 2000

HS Code	Commodity Description [1]	Value ($000,000)	% Total Exports
900110	Optical fibres, optical fibre bundles & cables, other than those of heading 85.44	177.7	18.8
854140	Photosensitive semiconductor devices, photovoltaic cells & light emit diodes	69.8	7.4
852520	Transmission apparatus, for radio- teleph. incorporating reception apparatus	69.5	7.3
880330	Aircraft parts nes	68.8	7.3
901380	Optical devices, appliances and instruments, nes	63.5	6.7
903289	Automatic regulating or controlling instruments and apparatus, nes	42.7	4.5
853710	Boards, panels, including numerical control panels, for a voltage <= 1,000 V	42.2	4.5
847989	Machines & mechanical appliances nes having individual functions	38.2	4.0
852530	Television cameras	30.3	3.2
852510	Transmission apparatus for radio-teleph radio-broadcasting or television	27.6	2.9
901819	Electro-diagnostic apparatus, nes	27.4	2.9
847330	Parts and accessories of automatic data processing machines & units thereof	25.2	2.7
901910	Mechano-therapy appl; massage app; psychological aptitude-testing apparatus	23.8	2.5
901480	Navigational instruments and appliances nes	16.5	1.7
852990	Parts suitable for use solely or princ. with the app of headings 85.25 to 85.28 [2]	16.2	1.7
901580	Surveying, hydrographic, oceanographic, meteorological or geophysical inst. nes	15.9	1.7
842489	Mech appl (whether or not hand-op) for proj/disp or spraying liq. or powders, nes	15.3	1.6
851790	Parts of electrical apparatus for line telephone or line telegraphy	15.2	1.6
847990	Parts of machines & mechanical appliances nes having individual functions	14.3	1.5
903090	Parts & access for inst & app for meas or checking electrical quantities	12.2	1.3
841191	Parts of turbo-jets or turbo-propellers	12.1	1.3
284440	Radio active elements & isotopes nes, their mixtures & compounds thereof	11.9	1.3
851730	Telephonic or telegraphic switching apparatus	11.6	1.2
853400	Printed circuits	7.0	0.7
841181	Gas turbines nes of a power not exceeding 5000 KW	5.6	0.6
Subtotal		**860.4**	**90.9**
	All Other High Technology Commodities	86.4	9.1
Total		**946.8**	**100.0**

HS code = Harmonized System commodity code; NES = Not Elsewhere Specified

1. Commodity descriptions are drawn from the approved Harmonized System coding manual. They contain numerous spelling anomalies that have been left in original form in this table.
2. Refers to broadcasting and radar transmission and receiving equipment

Source: BC STATS and Statistics Canada

Detailed Table 19. Top 25 High Technology Import Commodities, 2000

HS Code	Commodity Description [1]	Value ($000,000)	% Total Imports
847330	Parts and accessories of automatic data processing machines & units thereof	412.1	11.6
851790	Parts of electrical apparatus for line telephone or line telegraphy	280.8	7.9
880330	Aircraft parts nes	194.2	5.5
852520	Transmission apparatus, for radio- teleph incorporating reception apparatus	140.4	4.0
880240	Aircraft nes of an unladen weight exceeding 15,000 kg	138.7	3.9
903289	Automatic regulating or controlling instruments and apparatus, nes	137.3	3.9
852990	Parts suitable for use solely or princ with the app of headings 85.25 to 85.28 [2]	136.1	3.8
841191	Parts of turbo-jets or turbo-propellers	121.7	3.4
880230	Aircraft nes of an unladen weight > 2,000 kg but not exceeding 15,000 kg	111.2	3.1
900110	Optical fibres, optical fibre bundles & cables, other than those of heading 85.44	93.2	2.6
847989	Machines & mechanical appliances nes having individual functions	84.1	2.4
293390	Heterocyclic cmpds with nitrogen hetero-atom(s) only, nes	83.7	2.4
853710	Boards, panels, including numerical control panels, for a voltage <= 1,000 V	79.5	2.2
901890	Instruments and appliances used in medical or veterinary sciences, nes	78.6	2.2
841199	Parts of gas turbines nes	77.7	2.2
841112	Turbo-jets of a thrust exceeding 25 KN	57.5	1.6
293490	Heterocyclic compounds, nes	49.2	1.4
847990	Parts of machines & mechanical appliances nes having individual functions	48.8	1.4
293090	Organo-sulphur compounds, nes	42.3	1.2
293339	Heterocyclic cmpds cntg an unfused pyridine ring in the structure, nes	42.0	1.2
853400	Printed circuits	41.2	1.2
852510	Transmission apparatus for radio-teleph radio-broadcasting or television	39.4	1.1
293100	Organo-inorganic compounds, nes	38.8	1.1
293229	Lactones, nes	35.2	1.0
292429	Cyclic amides and their derivatives, nes; salts thereof	33.2	0.9
Subtotal		**2,596.9**	**73.4**
	All Other High Technology Commodities	942.5	26.6
Total		**3,539.4**	**100.0**

HS code = Harmonized System commodity code; NES = Not Elsewhere Specified

1. Commodity descriptions are drawn from the approved Harmonized System coding manual. They contain numerous spelling anomalies that have been left in original form in this table.
2. Refers to broadcasting and radar transmission and receiving equipment

Source: BC STATS and Statistics Canada

Detailed Table 20. Exports of High Technology Goods and Total Goods, by Destination, 1990-2000

Value ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
High Technology Exports											
United States	168.3	184.8	327.3	342.9	367.7	399.9	348.8	424.8	614.8	681.3	797.7
Pacific Rim	38.6	41.2	64.6	88.5	86.8	101.2	109.9	117.8	99.4	70.4	63.7
Japan	*12.6*	*10.9*	*13.9*	*12.8*	*14.6*	*28.2*	*11.8*	*14.1*	*5.6*	*7.5*	*28.9*
Hong Kong	*2.0*	*5.3*	*18.4*	*17.8*	*20.4*	*29.9*	*13.9*	*21.7*	*34.1*	*9.6*	*4.2*
People's Republic of China	*4.0*	*6.8*	*11.9*	*8.2*	*11.2*	*3.9*	*19.9*	*28.0*	*26.9*	*8.1*	*4.0*
Taiwan	*1.8*	*1.3*	*3.3*	*6.5*	*3.6*	*5.5*	*8.1*	*14.4*	*17.5*	*23.9*	*6.1*
Australia	*3.3*	*2.9*	*3.9*	*4.0*	*4.7*	*3.5*	*2.9*	*2.8*	*2.5*	*3.8*	*3.8*
European Union (1996)	42.9	21.7	24.9	33.5	35.6	39.4	24.2	32.5	36.4	37.5	54.8
Netherlands	*1.2*	*4.3*	*2.8*	*2.0*	*5.6*	*7.6*	*2.1*	*7.0*	*7.2*	*4.9*	*5.4*
Germany	*3.1*	*3.2*	*5.3*	*6.0*	*6.8*	*5.5*	*2.6*	*1.7*	*6.6*	*5.1*	*5.4*
United Kingdom	*13.5*	*3.8*	*5.7*	*14.0*	*9.3*	*7.2*	*7.7*	*9.1*	*6.4*	*9.9*	*10.9*
France	*16.9*	*4.0*	*3.0*	*3.5*	*3.3*	*5.5*	*3.1*	*6.4*	*5.8*	*7.4*	*2.0*
All Other Countries	20.0	19.7	29.5	32.0	29.7	22.2	29.1	34.6	19.4	29.0	30.6
Total	**269.8**	**267.4**	**446.3**	**496.9**	**519.8**	**562.7**	**511.9**	**609.7**	**770.1**	**818.1**	**946.8**
Total Exports											
United States	6,979.8	6,617.9	7,993.2	10,061.0	12,354.6	13,293.3	13,895.1	14,863.1	16,375.0	19,370.7	21,438.3
Pacific Rim	6,372.7	5,779.5	5,842.1	6,887.2	7,897.6	9,861.4	9,226.4	9,023.7	6,969.7	6,933.6	7,833.5
Japan	*4,635.7*	*4,046.0*	*4,133.1*	*4,946.5*	*5,657.9*	*6,767.5*	*6,403.8*	*6,003.4*	*4,548.5*	*4,326.2*	*4,663.7*
Hong Kong	*90.7*	*94.1*	*125.3*	*149.1*	*191.5*	*270.6*	*258.3*	*352.0*	*272.2*	*255.9*	*248.4*
People's Republic of China	*199.9*	*228.9*	*244.3*	*284.3*	*305.2*	*499.5*	*514.1*	*455.5*	*464.8*	*590.7*	*736.1*
Taiwan	*240.0*	*262.5*	*265.0*	*347.3*	*360.9*	*482.2*	*354.3*	*457.3*	*399.6*	*363.7*	*409.7*
Australia	*271.4*	*224.3*	*221.7*	*224.1*	*261.8*	*298.4*	*243.2*	*235.9*	*226.3*	*211.4*	*238.6*
European Union (1996)	2,627.6	2,227.8	2,024.0	1,556.5	1,923.8	2,855.7	1,959.5	2,064.1	2,008.3	1,884.2	2,545.2
Netherlands	*201.6*	*188.7*	*151.8*	*135.1*	*99.3*	*184.7*	*164.1*	*204.3*	*251.5*	*235.3*	*173.6*
Germany	*517.6*	*448.5*	*427.6*	*349.6*	*465.7*	*694.2*	*409.1*	*475.6*	*395.6*	*298.9*	*524.2*
United Kingdom	*692.2*	*571.4*	*542.5*	*310.5*	*321.3*	*385.8*	*336.4*	*288.7*	*302.5*	*286.8*	*367.9*
France	*289.7*	*230.9*	*168.2*	*138.7*	*169.0*	*318.1*	*182.3*	*183.5*	*175.6*	*166.7*	*218.1*
All Other Countries	*667.7*	*589.8*	*493.3*	*511.0*	*658.4*	*901.1*	*683.8*	*809.8*	*692.1*	*549.6*	*701.3*
Total	**16,647.8**	**15,215.0**	**16,352.6**	**19,015.7**	**22,834.5**	**26,911.4**	**25,764.8**	**26,760.7**	**26,045.1**	**28,738.0**	**32,518.3**

Source: BC STATS and Statistics Canada

Detailed Table 20 (ctd). Exports of High Technology Goods and Total Goods, by Destination, 1990-2000

	% change from previous year									
	1991	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
High Technology Exports										
United States	9.8	77.1	4.8	7.2	8.8	-12.8	21.8	44.7	10.8	17.1
Pacific Rim	6.8	56.6	37.1	-1.9	16.5	8.6	7.2	-15.6	-29.2	-9.5
Japan	*-13.5*	*26.8*	*-7.6*	*14.3*	*92.6*	*-58.1*	*19.7*	*-60.7*	*35.6*	*284.0*
Hong Kong	*160.8*	*249.0*	*-3.4*	*14.6*	*47.0*	*-53.5*	*55.7*	*57.4*	*-71.8*	*-56.3*
People's Republic of China	*69.7*	*74.4*	*-31.0*	*36.4*	*-65.1*	*406.5*	*40.5*	*-3.9*	*-69.8*	*-51.2*
Taiwan	*-27.6*	*160.8*	*93.8*	*-44.4*	*53.5*	*45.9*	*78.7*	*21.6*	*36.3*	*-74.3*
Australia	*-11.4*	*32.5*	*3.0*	*17.8*	*-24.3*	*-18.0*	*-2.4*	*-12.3*	*51.6*	*0.2*
European Union (1996)	-49.4	14.8	34.5	6.2	10.7	-38.6	34.1	12.2	2.9	46.1
Netherlands	*253.4*	*-35.0*	*-26.8*	*175.4*	*36.2*	*-72.4*	*230.0*	*4.0*	*-32.9*	*11.6*
Germany	*3.3*	*65.3*	*13.3*	*11.7*	*-18.4*	*-52.1*	*-36.7*	*292.5*	*-22.5*	*5.9*
United Kingdom	*-71.8*	*50.2*	*143.8*	*-33.5*	*-22.9*	*6.9*	*18.7*	*-29.9*	*55.7*	*10.0*
France	*-76.2*	*-24.5*	*15.6*	*-6.6*	*67.7*	*-43.7*	*106.0*	*-9.4*	*28.3*	*-72.9*
All Other Countries	-1.7	50.0	8.2	-7.0	-25.4	31.2	19.0	-43.8	49.1	5.7
Total Growth	**-0.9**	**66.9**	**11.3**	**4.6**	**8.3**	**-9.0**	**19.1**	**26.3**	**6.2**	**15.7**
Total Exports										
United States	-5.2	20.8	25.9	22.8	7.6	4.5	7.0	10.2	18.3	10.7
Pacific Rim	-9.3	1.1	17.9	14.7	24.9	-6.4	-2.2	-22.8	-0.5	13.0
Japan	*-12.7*	*2.2*	*19.7*	*14.4*	*19.6*	*-5.4*	*-6.3*	*-24.2*	*-4.9*	*7.8*
Hong Kong	*3.7*	*33.1*	*19.0*	*28.5*	*41.2*	*-4.5*	*36.3*	*-22.7*	*-6.0*	*-2.9*
People's Republic of China	*14.5*	*6.7*	*16.4*	*7.3*	*63.7*	*2.9*	*-11.4*	*2.0*	*27.1*	*24.6*
Taiwan	*9.4*	*1.0*	*31.0*	*3.9*	*33.6*	*-26.5*	*29.1*	*-12.6*	*-9.0*	*12.7*
Australia	*-17.3*	*-1.2*	*1.1*	*16.8*	*14.0*	*-18.5*	*-3.0*	*-4.1*	*-6.6*	*12.9*
European Union (1996)	-15.2	-9.1	-23.1	23.6	48.4	-31.4	5.3	-2.7	-6.2	35.1
Netherlands	*-6.4*	*-19.5*	*-11.0*	*-26.4*	*85.9*	*-11.2*	*24.6*	*23.1*	*-6.4*	*-26.2*
Germany	*-13.4*	*-4.7*	*-18.3*	*33.2*	*49.1*	*-41.1*	*16.2*	*-16.8*	*-24.4*	*75.4*
United Kingdom	*-17.4*	*-5.1*	*-42.8*	*3.5*	*20.1*	*-12.8*	*-14.2*	*4.8*	*-5.2*	*28.3*
France	*-20.3*	*-27.1*	*-17.5*	*21.8*	*88.2*	*-42.7*	*0.6*	*-4.3*	*-5.1*	*30.8*
All Other Countries	-11.7	-16.4	3.6	28.9	36.9	-24.1	18.4	-14.5	-20.6	27.6
Total Growth	**-8.6**	**7.5**	**16.3**	**20.1**	**17.9**	**-4.3**	**3.9**	**-2.7**	**10.3**	**13.2**

Source: BC STATS and Statistics Canada

Detailed Table 21. Imports of High Technology, by Country of Origin, 1990-2000

Value ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
High Technology Imports											
United States	993.3	1,021.3	1,161.0	1,268.7	1,521.4	1,737.8	1,240.4	1,449.2	1,652.8	1,828.9	2,014.8
Pacific Rim	227.9	257.9	295.8	363.7	460.9	552.4	253.4	272.6	295.3	364.1	479.2
Japan	*136.5*	*155.9*	*167.3*	*189.9*	*212.9*	*254.6*	*106.7*	*119.1*	*135.5*	*157.6*	*189.4*
Hong Kong	*8.7*	*9.7*	*10.7*	*12.1*	*11.8*	*13.6*	*6.0*	*7.4*	*6.0*	*5.7*	*5.8*
People's Republic of China	*1.9*	*2.8*	*5.0*	*8.5*	*16.2*	*23.1*	*18.6*	*25.0*	*32.8*	*47.3*	*131.6*
Taiwan	*25.2*	*29.2*	*39.4*	*52.0*	*59.3*	*62.4*	*37.9*	*50.2*	*48.3*	*57.2*	*69.0*
Australia	*4.6*	*2.5*	*3.4*	*3.3*	*5.4*	*6.1*	*7.5*	*6.3*	*7.1*	*8.9*	*10.9*
European Union (1996)	202.8	259.7	286.3	269.6	307.9	435.1	381.9	576.6	541.0	651.3	683.0
Netherlands	*11.7*	*8.4*	*6.7*	*8.6*	*14.9*	*20.4*	*10.2*	*8.4*	*11.5*	*11.7*	*11.0*
Germany	*37.9*	*50.3*	*49.2*	*61.8*	*75.5*	*68.5*	*62.6*	*83.3*	*88.3*	*115.0*	*133.7*
United Kingdom	*43.4*	*42.8*	*51.9*	*54.5*	*68.6*	*121.5*	*100.1*	*87.1*	*109.3*	*168.6*	*250.2*
France	*56.5*	*99.1*	*110.3*	*53.4*	*39.0*	*69.4*	*74.4*	*245.9*	*161.2*	*187.1*	*89.5*
All Other Countries	82.6	88.4	96.6	118.3	147.5	178.2	136.9	129.4	145.9	210.4	362.5
Total Value	**1,506.6**	**1,627.3**	**1,839.7**	**2,020.4**	**2,437.8**	**2,903.5**	**2,012.5**	**2,427.8**	**2,634.9**	**3,054.7**	**3,539.4**

% change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
High Technology Imports										
United States	2.8	13.7	9.3	19.9	14.2	-28.6	16.8	14.0	10.7	10.2
Pacific Rim	13.2	14.7	23.0	26.7	19.8	-54.1	7.6	8.3	23.3	31.6
Japan	*14.2*	*7.3*	*13.5*	*12.1*	*19.5*	*-58.1*	*11.7*	*13.7*	*16.3*	*20.2*
Hong Kong	*11.8*	*10.7*	*12.3*	*-2.1*	*15.0*	*-55.5*	*23.1*	*-18.8*	*-6.3*	*2.0*
People's Republic of China	*46.8*	*79.8*	*70.6*	*89.4*	*43.0*	*-19.5*	*34.1*	*31.5*	*44.1*	*178.1*
Taiwan	*15.7*	*34.8*	*32.2*	*14.1*	*5.1*	*-39.2*	*32.5*	*-3.8*	*18.5*	*20.5*
Australia	*-46.2*	*35.7*	*-2.5*	*62.6*	*14.7*	*21.3*	*-15.5*	*12.8*	*25.4*	*22.8*
European Union	28.1	10.2	-5.8	14.2	41.3	-12.2	51.0	-6.2	20.4	4.9
Netherlands	*-28.2*	*-20.5*	*28.7*	*73.1*	*37.3*	*-49.8*	*-17.6*	*36.5*	*1.3*	*-6.1*
Germany	*32.8*	*-2.2*	*25.5*	*22.1*	*-9.3*	*-8.6*	*33.1*	*6.0*	*30.2*	*16.3*
United Kingdom	*-1.5*	*21.4*	*4.9*	*26.0*	*77.1*	*-17.6*	*-13.0*	*25.4*	*54.3*	*48.4*
France	*75.3*	*11.3*	*-51.5*	*-26.9*	*77.8*	*7.3*	*230.2*	*-34.4*	*16.1*	*-52.2*
All Other Countries	7.0	9.3	22.5	24.7	20.8	-23.2	-5.4	12.7	44.2	72.3
Total Growth	**8.0**	**13.1**	**9.8**	**20.7**	**19.1**	**-30.7**	**20.6**	**8.5**	**15.9**	**15.9**

Source: BC STATS and Statistics Canada

Detailed Table 22. Balance of Trade in High Technology Goods, by Country, 1990-2000

	Balance ($ million)										
	1990	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
High Technology Commodities											
United States	-825.0	-836.6	-833.8	-925.9	-1,153.8	-1,337.8	-891.6	-1,024.4	-1,038.0	-1,147.6	-1,217.0
Pacific Rim	-189.3	-216.7	-231.2	-275.3	-374.1	-451.3	-143.5	-154.8	-195.9	-293.7	-415.5
Japan	*-123.9*	*-145.0*	*-153.4*	*-177.1*	*-198.3*	*-226.4*	*-94.9*	*-105.0*	*-129.9*	*-150.0*	*-160.5*
Hong Kong	*-6.7*	*-4.4*	*7.7*	*5.7*	*8.5*	*16.3*	*7.9*	*14.2*	*28.1*	*4.0*	*-1.6*
People's Republic of China	*2.1*	*4.1*	*6.9*	*-0.3*	*-4.9*	*-19.2*	*1.3*	*3.0*	*-6.0*	*-39.2*	*-127.6*
Taiwan	*-23.5*	*-27.9*	*-36.0*	*-45.5*	*-55.7*	*-56.8*	*-29.8*	*-35.8*	*-30.8*	*-33.3*	*-62.8*
Australia	*-1.3*	*0.4*	*0.5*	*0.7*	*-0.7*	*-2.6*	*-4.6*	*-3.5*	*-4.6*	*-5.1*	*-7.2*
European Union (1996)	-159.9	-238.0	-261.4	-236.1	-272.3	-395.6	-357.6	-544.1	-504.5	-613.8	-628.2
Netherlands	*-10.5*	*-4.1*	*-3.9*	*-6.6*	*-9.3*	*-12.8*	*-8.1*	*-1.5*	*-4.3*	*-6.8*	*-5.5*
Germany	*-34.8*	*-47.1*	*-43.9*	*-55.7*	*-68.7*	*-63.0*	*-59.9*	*-81.6*	*-81.7*	*-109.9*	*-128.4*
United Kingdom	*-29.9*	*-38.9*	*-46.2*	*-40.5*	*-59.3*	*-114.3*	*-92.5*	*-78.0*	*-102.9*	*-158.7*	*-239.3*
France	*-39.6*	*-95.0*	*-107.2*	*-49.9*	*-35.8*	*-63.9*	*-71.4*	*-239.5*	*-155.4*	*-179.7*	*-87.5*
All Other Countries	-62.6	-68.7	-67.1	-86.4	-117.8	-156.0	-107.8	-94.8	-126.5	-181.4	-331.8
Total	**-1,236.7**	**-1,360.0**	**-1,393.5**	**-1,523.6**	**-1,918.0**	**-2,340.8**	**-1,500.6**	**-1,818.1**	**-1,864.9**	**-2,236.6**	**-2,592.6**

Source: BC STATS and Statistics Canada

Detailed Table 23. Exports of High Technology Goods, by Commodity Group, 1990-2000

Value ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	118.8	139.7	270.3	273.0	279.7	272.3	245.1	278.6	301.9	230.7	212.2
Computer Integrated Manufacturing	30.9	34.7	52.8	67.9	78.4	88.8	90.3	112.6	117.8	116.6	127.2
Aerospace	77.3	35.8	25.4	40.6	25.6	55.2	53.7	54.7	104.1	129.1	110.2
Electronics	8.7	17.1	35.9	45.3	67.3	71.2	64.6	62.1	74.1	77.8	65.2
Material Design	6.8	9.8	21.1	24.1	22.6	18.5	0.9	13.7	57.7	94.0	178.6
Life Sciences	18.1	19.0	27.1	24.5	24.1	26.5	29.4	47.4	57.0	73.9	79.5
Opto-Electronics	8.0	8.6	12.2	19.5	19.7	25.5	24.6	35.9	51.1	91.1	166.3
Weapons and Nuclear	1.0	2.0	0.9	0.7	1.1	2.6	2.5	4.0	4.5	2.6	6.6
Biotechnology	0.3	0.7	0.6	1.3	1.4	2.0	0.8	0.7	2.0	2.3	1.0
Total	**269.9**	**267.4**	**446.3**	**496.9**	**519.8**	**562.7**	**511.9**	**609.7**	**770.1**	**818.1**	**946.8**

% change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	17.6	93.5	1.0	2.4	-2.6	-10.0	13.7	8.4	-23.6	-8.0
Computer Integrated Manufacturing	12.0	52.4	28.5	15.6	13.2	1.7	24.7	4.6	-1.0	9.1
Aerospace	-53.7	-29.0	59.8	-36.9	115.7	-2.7	1.9	90.5	24.0	-14.6
Electronics	97.4	109.8	26.3	48.4	5.9	-9.3	-3.8	19.2	5.1	-16.2
Material Design	44.7	113.7	14.5	-6.4	-18.0	-94.9	1351.2	321.9	63.0	90.0
Life Sciences	5.0	42.5	-9.7	-1.6	10.2	10.8	61.0	20.4	29.6	7.6
Opto-Electronics	7.2	42.1	59.8	1.4	29.4	-3.7	45.9	42.3	78.4	82.6
Weapons and Nuclear	91.6	-54.5	-18.7	48.7	132.7	-3.4	62.9	10.8	-41.1	149.9
Biotechnology	177.6	-15.7	113.5	8.8	45.8	-60.5	-10.8	179.2	15.0	-57.5
Total	**-0.9**	**66.9**	**11.3**	**4.6**	**8.3**	**-9.0**	**19.1**	**26.3**	**6.2**	**15.7**

Source: BC STATS and Statistics Canada

Detailed Table 24. Imports of High Technology Goods, by Commodity Group, 1990-2000

Value ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	643.3	705.0	836.2	995.1	1,195.7	1,374.5	593.9	656.4	705.5	811.3	1,100.6
Computer Integrated Manufacturing	145.9	154.0	147.1	206.5	260.7	307.7	286.9	392.2	388.7	403.3	450.1
Aerospace	270.5	317.9	347.5	233.5	234.7	334.5	423.3	616.0	669.4	783.7	807.8
Electronics	126.4	132.0	144.2	161.9	225.1	291.1	100.9	115.3	126.4	153.7	204.8
Material Design	6.1	6.4	11.1	10.3	16.7	18.1	24.8	22.5	40.0	65.3	109.6
Life Sciences	251.0	256.2	283.8	331.6	398.3	476.2	472.7	509.7	572.9	690.2	690.9
Opto-Electronics	16.5	13.3	18.7	20.3	22.8	23.6	22.2	31.3	34.8	39.2	64.3
Weapons and Nuclear	32.0	26.1	30.5	34.1	50.6	45.9	55.5	52.1	49.8	56.8	58.7
Biotechnology	14.8	16.4	20.7	27.1	33.2	32.0	32.3	32.4	47.6	51.3	52.7
Total	**1,506.6**	**1,627.3**	**1,839.7**	**2,020.4**	**2,437.8**	**2,903.5**	**2,012.5**	**2,427.8**	**2,634.9**	**3,054.7**	**3,539.4**

% change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	9.6	18.6	19.0	20.2	15.0	-56.8	10.5	7.5	15.0	35.7
Computer Integrated Manufacturing	5.6	-4.5	40.4	26.2	18.0	-6.8	36.7	-0.9	3.8	11.6
Aerospace	17.5	9.3	-32.8	0.5	42.5	26.5	45.5	8.7	17.1	3.1
Electronics	4.5	9.3	12.3	39.1	29.3	-65.4	14.3	9.6	21.7	33.2
Material Design	3.7	74.3	-7.2	62.1	8.2	36.9	-9.1	77.5	63.3	68.0
Life Sciences	2.1	10.8	16.9	20.1	19.5	-0.7	7.8	12.4	20.5	0.1
Opto-Electronics	-19.5	41.0	8.4	12.1	3.6	-5.9	41.1	11.3	12.4	64.3
Weapons and Nuclear	-18.6	16.9	12.0	48.2	-9.2	20.9	-6.2	-4.4	14.1	3.3
Biotechnology	10.9	26.0	30.8	22.7	-3.6	0.9	0.2	46.9	7.9	2.6
Total	**8.0**	**13.1**	**9.8**	**20.7**	**19.1**	**-30.7**	**20.6**	**8.5**	**15.9**	**15.9**

Source: BC STATS and Statistics Canada

Detailed Table 25. Balance of Trade in High Technology Goods, by Commodity Group, 1990-2000

	Balance ($ million)										
	1990	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
Computers and Telecommunications	-524.5	-565.3	-565.8	-722.1	-916.0	-1,102.1	-348.8	-377.8	-403.6	-580.6	-888.4
Computer Integrated Manufacturing	-115.0	-119.4	-94.3	-138.6	-182.2	-218.9	-196.6	-279.6	-270.9	-286.6	-322.9
Aerospace	-193.3	-282.2	-322.1	-192.9	-209.1	-279.3	-369.6	-561.4	-565.3	-654.6	-697.6
Electronics	-117.7	-114.9	-108.3	-116.6	-157.9	-219.9	-36.3	-53.1	-52.3	-75.9	-139.6
Material Design	0.7	3.5	9.9	13.8	5.8	0.4	-23.8	-8.9	17.7	28.7	69.0
Life Sciences	-232.8	-237.2	-256.7	-307.2	-374.3	-449.6	-443.3	-462.3	-515.8	-616.2	-611.4
Opto-Electronics	-8.5	-4.7	-6.5	-0.8	-3.0	2.0	2.4	4.6	16.2	51.9	102.0
Weapons and Nuclear	-31.0	-24.1	-29.6	-33.4	-49.5	-43.3	-53.0	-48.0	-45.3	-54.2	-52.1
Biotechnology	-14.5	-15.7	-20.1	-25.8	-31.8	-30.0	-31.5	-31.7	-45.6	-49.0	-51.7
Total	**-1,236.7**	**-1,360.0**	**-1,393.5**	**-1,523.6**	**-1,918.0**	**-2,340.8**	**-1,500.6**	**-1,818.1**	**-1,864.9**	**-2,236.6**	**-2,592.6**

Source: BC STATS and Statistics Canada

Detailed Table 26. Exports of High Technology Goods to the United States, by Commodity Group, 1990-2000

Value ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	75.3	91.7	203.1	186.4	187.6	171.5	141.0	164.8	207.8	165.6	172.7
Computer Integrated Manufacturing	20.0	22.2	22.6	35.3	47.6	57.1	67.8	70.0	91.9	89.8	94.3
Aerospace	46.7	29.0	22.2	28.0	21.3	49.4	41.6	49.1	97.1	122.6	88.2
Electronics	7.3	16.1	33.9	42.3	56.3	65.9	56.7	57.8	69.1	66.9	58.3
Material Design	5.7	7.6	20.9	23.6	21.7	18.2	0.8	13.7	57.3	93.9	178.3
Life Sciences	8.8	10.9	16.4	14.9	17.2	16.8	23.3	40.4	46.7	63.6	69.4
Opto-Electronics	3.6	5.4	7.4	11.6	14.7	19.8	16.3	25.0	40.1	77.2	134.4
Weapons and Nuclear	0.7	1.3	0.2	0.1	0.5	0.8	0.7	3.5	4.2	1.1	1.8
Biotechnology	0.2	0.6	0.5	0.7	0.8	0.4	0.6	0.6	0.7	0.6	0.3
Total	**168.3**	**184.7**	**327.3**	**342.9**	**367.7**	**399.9**	**348.8**	**424.8**	**614.8**	**681.3**	**797.7**

% change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	21.7	121.6	-8.2	0.6	-8.6	-17.8	16.9	26.1	-20.3	4.3
Computer Integrated Manufacturing	11.0	1.6	56.3	34.6	20.1	18.6	3.3	31.3	-2.3	5.0
Aerospace	-37.9	-23.4	25.8	-23.9	131.9	-15.7	18.0	97.6	26.2	-28.0
Electronics	121.2	110.4	24.7	33.1	17.2	-14.0	1.9	19.6	-3.1	-12.9
Material Design	31.7	175.9	12.9	-7.7	-16.2	-95.8	1666.4	319.3	63.9	89.9
Life Sciences	23.9	51.1	-9.1	15.3	-2.2	38.4	73.7	15.5	36.3	9.3
Opto-Electronics	50.8	37.4	55.5	27.1	34.9	-17.6	52.7	60.6	92.6	74.0
Weapons and Nuclear	84.8	-86.1	-27.2	289.1	61.4	-16.0	415.4	18.8	-72.5	55.0
Biotechnology	212.3	-10.6	35.8	9.0	-54.5	70.4	-0.5	10.5	-16.6	-45.5
Total	**9.7**	**77.2**	**4.8**	**7.2**	**8.8**	**-12.8**	**21.8**	**44.7**	**10.8**	**17.1**

Source: BC STATS and Statistics Canada

Detailed Table 27. Imports of High Technology Goods from the United States, by Commodity Group, 1990-2000

Value ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	420.7	452.8	543.7	635.5	751.7	877.9	386.0	439.7	483.1	481.0	564.2
Computer Integrated Manufacturing	94.3	10.4	103.7	146.7	191.3	198.9	195.9	283.2	271.5	290.9	318.0
Aerospace	188.7	194.0	217.6	156.9	174.9	234.8	292.8	300.9	382.3	416.9	461.7
Electronics	92.6	77.6	85.2	86.9	113.0	142.6	72.6	82.7	89.5	110.7	143.4
Material Design	5.7	5.6	10.3	9.2	15.8	15.5	22.8	20.8	36.8	58.8	91.1
Life Sciences	148.9	146.9	155.6	177.1	204.6	205.8	209.4	256.3	316.7	386.4	340.7
Opto-Electronics	11.5	8.8	11.3	12.8	14.3	14.5	13.0	17.3	19.4	22.8	36.5
Weapons and Nuclear	19.3	17.8	17.4	22.5	30.0	26.2	29.5	27.9	23.9	25.6	28.7
Biotechnology	11.6	13.3	16.1	21.2	25.7	21.5	18.4	20.5	29.5	35.8	30.4
Total	**993.3**	**927.3**	**1,161.0**	**1,268.7**	**1,521.4**	**1,737.8**	**1,240.4**	**1,449.2**	**1,652.8**	**1,828.9**	**2,014.8**

% change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	7.6	20.1	16.9	18.3	16.8	-56.0	13.9	9.9	-0.4	17.3
Computer Integrated Manufacturing	-88.9	893.0	41.5	30.4	3.9	-1.5	44.6	-4.1	7.2	9.3
Aerospace	2.8	12.2	-27.9	11.5	34.3	24.7	2.8	27.1	9.1	10.7
Electronics	-16.2	9.7	2.0	30.0	26.2	-49.1	13.9	8.3	23.6	29.6
Material Design	-2.1	83.3	-10.5	71.3	-1.7	46.6	-8.7	76.9	59.7	55.1
Life Sciences	-1.3	5.9	13.8	15.6	0.6	1.7	22.4	23.6	22.0	-11.8
Opto-Electronics	-23.1	28.1	13.3	11.7	1.6	-10.3	33.0	12.3	17.1	60.2
Weapons and Nuclear	-7.4	-2.2	28.7	33.7	-12.7	12.4	-5.5	-14.2	6.9	12.3
Biotechnology	14.1	21.6	31.1	21.3	-16.3	-14.3	11.1	44.0	21.5	-15.1
Total	**-6.6**	**25.2**	**9.3**	**19.9**	**14.2**	**-28.6**	**16.8**	**14.0**	**10.7**	**10.2**

Source: BC STATS and Statistics Canada

Detailed Table 28. Balance of Trade in High Technology Goods with the United States, by Commodity Group, 1990-2000

Balance ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	-345.4	-361.1	-340.6	-449.1	-564.1	-706.4	-245.1	-275.0	-275.3	-315.4	-391.5
Computer Integrated Manufacturing	-74.2	11.8	-81.1	-111.4	-143.8	-141.7	-128.1	-213.2	-179.6	-201.2	-223.8
Aerospace	-142.0	-164.9	-195.3	-128.9	-153.6	-185.4	-251.1	-251.7	-285.2	-294.4	-373.5
Electronics	-85.3	-61.5	-51.3	-44.6	-56.7	-76.7	-15.9	-24.9	-20.4	-43.8	-85.1
Material Design	0.0	1.9	10.5	14.3	5.9	2.7	-22.0	-7.1	20.5	35.1	87.2
Life Sciences	-140.2	-136.1	-139.2	-162.2	-187.5	-189.0	-186.1	-215.9	-270.1	-322.9	-271.2
Opto-Electronics	-7.9	-3.4	-3.8	-1.2	0.4	5.3	3.3	7.7	20.7	54.5	97.9
Weapons and Nuclear	-18.6	-16.6	-17.3	-22.3	-29.5	-25.4	-28.8	-24.4	-19.7	-24.4	-26.9
Biotechnology	-11.4	-12.7	-15.6	-20.4	-24.9	-21.1	-17.8	-19.9	-28.8	-35.3	-30.1
Total	**-825.0**	**-742.6**	**-833.8**	**-925.9**	**-1,153.8**	**-1,337.8**	**-891.6**	**-1,024.4**	**-1,038.0**	**-1,147.6**	**-1,217.0**

Source: BC STATS and Statistics Canada

Detailed Table 29. Exports of High Technology Goods to the Pacific Rim, by Commodity Group, 1990-2000

Values ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	16.4	23.4	36.6	57.3	52.1	67.7	85.0	90.3	78.2	45.5	23.5
Computer Integrated Manufacturing	7.2	8.0	14.1	18.3	21.7	19.9	9.7	17.9	13.0	13.0	17.1
Aerospace	5.4	0.6	1.4	2.4	1.9	1.6	2.7	2.6	2.1	1.6	2.2
Electronics	0.7	0.6	1.1	1.1	4.3	3.0	5.3	1.5	1.9	4.2	2.9
Material Design	0.9	2.3	0.2	0.5	0.6	0.3	0.1	0.0	0.1	0.0	0.0
Life Sciences	6.4	4.8	7.7	6.5	4.3	6.9	3.9	3.5	2.7	3.7	3.7
Opto-Electronics	1.4	1.3	2.9	2.0	1.7	1.4	2.3	1.6	1.3	2.1	11.9
Weapons and Nuclear	0.2	0.3	0.6	0.3	0.2	0.3	0.6	0.4	0.1	0.4	2.2
Biotechnology	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.3
Total	**38.6**	**41.2**	**64.6**	**88.5**	**86.8**	**101.2**	**109.9**	**117.8**	**99.4**	**70.4**	**63.7**

% change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	42.6	56.4	56.7	-9.1	30.1	25.5	6.2	-13.3	-41.9	-48.4
Computer Integrated Manufacturing	10.7	75.8	29.7	18.7	-8.2	-51.5	84.9	-27.3	0.0	31.8
Aerospace	-89.6	143.8	73.5	-19.9	-15.3	71.0	-4.6	-20.1	-24.0	40.9
Electronics	-20.0	79.2	1.2	297.4	-29.5	74.7	-71.2	21.7	124.8	-31.0
Material Design	154.1	-92.1	207.1	10.9	-57.3	-50.7	-96.7	2707.5	-100.0	-
Life Sciences	-25.3	61.9	-15.4	-34.5	60.4	-43.0	-9.7	-23.5	35.1	0.0
Opto-Electronics	-4.6	121.7	-31.9	-16.3	-18.6	66.0	-31.0	-13.6	55.0	468.2
Weapons and Nuclear	76.0	86.1	-49.8	-28.9	49.8	108.0	-34.6	-82.7	465.3	425.0
Biotechnology	1.0	154.5	100.5	15.4	-40.8	165.8	-100.0	-	-15.0	2788.7
Total	**6.8**	**56.6**	**37.1**	**-1.9**	**16.5**	**8.6**	**7.2**	**-15.6**	**-29.2**	**-9.5**

Source: BC STATS and Statistics Canada

Detailed Table 30. Imports of High Technology Goods from the Pacific Rim, by Commodity Group, 1990-2000

Values ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	163.4	189.7	220.6	265.2	327.6	363.6	134.1	144.4	145.8	193.8	264.3
Computer Integrated Manufacturing	22.1	24.3	18.9	28.9	31.1	43.5	39.8	49.7	55.5	46.0	59.5
Aerospace	2.3	2.9	2.0	2.5	2.2	2.6	4.5	5.9	16.8	25.1	41.5
Electronics	12.9	17.0	22.0	34.1	56.8	90.7	18.0	22.7	23.8	24.5	33.8
Material Design	0.2	0.2	0.5	0.5	0.5	1.5	0.7	0.5	0.9	3.8	8.0
Life Sciences	18.7	18.2	22.0	22.3	33.1	38.3	42.7	33.1	32.1	49.3	41.3
Opto-Electronics	2.6	2.7	5.8	5.3	4.9	6.0	5.8	9.4	11.4	10.7	19.4
Weapons and Nuclear	5.1	2.6	3.8	4.0	4.0	6.0	7.2	6.6	7.6	8.3	7.8
Biotechnology	0.6	0.4	0.4	0.9	0.6	0.4	0.5	0.3	1.5	2.5	3.7
Total	**227.9**	**257.9**	**295.8**	**363.7**	**460.9**	**552.4**	**253.4**	**272.6**	**295.3**	**364.1**	**479.2**

% change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	16.1	16.3	20.2	23.5	11.0	-63.1	7.6	1.0	33.0	36.3
Computer Integrated Manufacturing	9.8	-22.2	53.3	7.5	39.7	-8.3	24.8	11.7	-17.2	29.5
Aerospace	-2.6	20.6	1.4	48.8	15.4	11.7	-22.5	-3.2	49.8	65.1
Electronics	32.5	29.0	55.2	66.4	59.7	-80.2	26.1	5.2	2.9	37.7
Material Design	25.1	-31.8	30.2	-14.0	18.3	75.7	28.9	186.2	352.0	108.0
Life Sciences	3.2	114.7	-7.7	-7.3	20.5	-1.8	61.1	21.3	53.8	-16.4
Opto-Electronics	27.3	118.8	-0.6	-4.3	222.5	-54.2	-24.1	68.6	-6.4	81.2
Weapons and Nuclear	-50.1	48.4	4.5	1.9	47.5	20.3	-8.2	15.0	9.9	-5.9
Biotechnology	-33.6	-3.2	118.0	-24.7	-36.8	11.4	-33.4	382.2	70.7	47.4
Total	**13.2**	**14.7**	**23.0**	**26.7**	**19.8**	**-54.1**	**7.6**	**8.3**	**23.3**	**31.6**

Source: BC STATS and Statistics Canada

Detailed Table 31. Balance of Trade in High Technology Goods with the Pacific Rim, by Commodity Group, 1990-2000

Balance ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	-147.0	-166.3	-184.0	-207.9	-275.5	-295.9	-49.1	-54.1	-67.5	-148.4	-240.8
Computer Integrated Manufacturing	-14.8	-16.2	-4.8	-10.7	-9.4	-23.5	-30.2	-31.9	-42.5	-33.0	-42.4
Aerospace	3.1	-2.3	-0.6	-0.2	-0.3	-1.0	-1.8	-3.2	-14.7	-23.5	-39.3
Electronics	-12.1	-16.5	-20.9	-33.1	-52.5	-87.7	-12.7	-21.1	-22.0	-20.3	-30.9
Material Design	0.7	2.0	-0.3	0.1	0.2	-1.2	-0.5	-0.5	-0.7	-3.8	-8.0
Life Sciences	-12.3	-13.4	-14.2	-15.7	-28.8	-31.4	-38.8	-29.6	-29.4	-45.7	-37.6
Opto-Electronics	-1.2	-1.4	-2.8	-3.3	-3.3	-4.6	-3.6	-7.9	-10.1	-8.6	-7.5
Weapons and Nuclear	-5.0	-2.2	-3.2	-3.7	-3.8	-5.7	-6.5	-6.2	-7.5	-7.9	-5.7
Biotechnology	-0.6	-0.4	-0.3	-0.8	-0.5	-0.3	-0.3	-0.3	-1.5	-2.5	-3.4
Total	**-189.3**	**-216.7**	**-231.2**	**-275.3**	**-374.1**	**-451.3**	**-143.5**	**-154.8**	**-195.9**	**-293.7**	**-415.5**

Source: BC STATS and Statistics Canada

Detailed Table 32. Exports of High Technology Goods to Japan, by Commodity Group, 1990-2000

Values ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	3.2	4.7	4.5	5.6	0.7	12.8	6.0	8.3	1.9	1.6	11.7
Computer Integrated Manufacturing	2.3	2.4	3.1	3.1	0.6	10.1	1.9	3.2	1.4	1.9	3.6
Aerospace	0.2	0.0	0.2	0.3	0.0	0.1	0.3	0.3	0.9	0.8	0.4
Electronics	0.0	0.0	0.1	0.1	6.7	0.9	1.0	0.5	0.4	1.1	0.1
Material Design	0.8	0.0	0.2	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0
Life Sciences	5.6	3.5	5.1	3.0	0.0	3.9	1.6	1.3	0.7	1.5	2.3
Opto-Electronics	0.4	0.3	0.7	0.6	2.1	0.4	0.5	0.2	0.2	0.5	8.8
Weapons and Nuclear	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.3	0.0	0.1	1.9
Biotechnology	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total	**12.6**	**10.9**	**13.9**	**12.8**	**14.6**	**28.2**	**11.8**	**14.1**	**5.6**	**7.5**	**28.9**

% change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	46.2	-4.3	25.2	-87.8	1784.6	-52.9	37.0	-76.9	-14.3	617.6
Computer Integrated Manufacturing	4.8	31.0	0.0	-81.3	1616.4	-80.7	66.9	-58.0	39.0	90.6
Aerospace	-86.5	811.8	59.4	-100.0	-	352.0	18.1	169.8	-17.9	-49.8
Electronics	-71.3	476.9	-6.7	11156.0	-85.9	10.4	-49.1	-21.9	170.7	-92.4
Material Design	-98.5	1489.4	-100.0	-	-99.9	-100.0	-	-	-100.0	-
Life Sciences	-37.9	45.8	-40.8	-100.0	-	-58.3	-22.1	-45.0	114.9	54.2
Opto-Electronics	-35.0	132.4	-12.4	265.4	-83.5	48.6	-56.3	-26.1	183.7	1733.0
Weapons and Nuclear	-67.8	-14.8	190.3	-100.0	-	807.2	-22.5	-95.3	1039.2	1247.7
Biotechnology	-100.0	-	-	-	-	588.7	-100.0	-	-100.0	-
Total	**-13.5**	**26.8**	**-7.6**	**14.3**	**92.6**	**-58.1**	**19.7**	**-60.7**	**35.6**	**284.0**

Source: BC STATS and Statistics Canada

Detailed Table 33. Imports of High Technology Goods from Japan, by Commodity Group, 1990-2000

Values ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	98.1	110.9	120.6	130.9	142.8	156.0	43.7	42.9	44.0	58.8	67.9
Computer Integrated Manufacturing	18.2	21.6	16.1	25.4	26.3	36.5	33.4	41.9	44.9	35.8	45.8
Aerospace	1.2	1.0	1.2	0.9	0.6	0.8	2.3	3.6	13.6	21.4	23.2
Electronics	4.2	7.9	9.0	12.2	24.2	39.1	7.7	8.9	9.0	8.5	15.0
Material Design	0.1	0.2	0.4	0.4	0.4	1.3	0.5	0.4	0.7	3.0	5.7
Life Sciences	11.5	10.9	13.8	14.1	13.6	15.4	13.7	14.3	15.0	22.1	18.7
Opto-Electronics	1.9	2.0	4.6	3.8	3.1	3.8	4.0	5.7	7.1	6.5	11.3
Weapons and Nuclear	0.9	1.2	1.2	1.4	1.3	1.5	1.1	1.3	1.2	1.1	1.1
Biotechnology	0.4	0.4	0.3	0.8	0.6	0.2	0.4	0.2	0.1	0.3	0.7
Total	**136.5**	**155.9**	**167.3**	**189.9**	**212.9**	**254.6**	**106.7**	**119.1**	**135.5**	**157.6**	**189.4**

% change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	13.0	8.8	8.6	9.0	9.2	-72.0	-1.8	2.6	33.5	15.5
Computer Integrated Manufacturing	18.3	-25.5	57.9	3.7	38.6	-8.5	25.3	7.3	-20.3	27.9
Aerospace	-17.7	19.8	-22.8	-31.8	37.2	170.8	56.3	278.3	57.4	8.4
Electronics	89.3	13.6	36.5	98.0	61.3	-80.4	15.5	1.9	-5.6	75.7
Material Design	66.4	156.9	-2.9	-10.0	239.8	-64.4	-5.6	47.3	362.1	88.0
Life Sciences	-5.2	27.2	1.8	-3.2	12.9	-10.7	4.3	4.7	47.5	-15.2
Opto-Electronics	4.0	129.8	-18.9	-16.9	20.1	5.5	43.3	24.2	-7.4	72.0
Weapons and Nuclear	36.1	4.1	18.2	-8.5	16.6	-27.0	19.6	-10.8	-4.8	0.2
Biotechnology	-18.3	-6.2	124.2	-25.9	-60.1	74.6	-57.9	-47.1	261.8	121.8
Total	**14.2**	**7.3**	**13.5**	**12.1**	**19.6**	**-58.1**	**11.7**	**13.7**	**16.3**	**20.2**

Source: BC STATS and Statistics Canada

Detailed Table 34. Balance of Trade in High Technology Goods with Japan, by Commodity Group, 1990-2000

Balance ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	-15.0	-16.9	-11.6	-19.8	-25.7	-23.7	-37.6	-34.6	-42.1	-57.1	-56.2
Computer Integrated Manufacturing	-95.8	-108.5	-117.4	-127.8	-142.2	-145.9	-31.5	-38.6	-43.5	-33.9	-42.2
Aerospace	-1.0	-1.0	-1.0	-0.6	-0.6	-0.8	-2.0	-3.2	-12.6	-20.6	-22.8
Electronics	-4.1	-7.9	-8.9	-12.2	-17.5	-38.1	-6.6	-8.3	-8.6	-7.4	-14.9
Material Design	0.7	-0.2	-0.3	-0.4	3.5	-1.3	-0.5	-0.4	-0.6	-3.0	-5.7
Life Sciences	-5.8	-7.3	-8.7	-11.0	-13.6	-11.5	-12.1	-13.0	-14.3	-20.6	-16.4
Opto-Electronics	-1.5	-1.7	-4.0	-3.2	-1.0	-3.4	-3.4	-5.5	-6.9	-6.1	-2.4
Weapons and Nuclear	-0.8	-1.1	-1.2	-1.4	-1.3	-1.5	-0.8	-1.1	-1.2	-1.0	0.7
Biotechnology	-0.4	-0.4	-0.3	-0.8	-0.6	-0.2	-0.4	-0.2	-0.1	-0.3	-0.6
Total	**-123.9**	**-145.0**	**-153.4**	**-177.1**	**-198.3**	**-226.4**	**-94.9**	**-105.0**	**-129.9**	**-150.0**	**-160.5**

Source: BC STATS and Statistics Canada

Detailed Table 35. Exports of High Technology Goods to the Pacific Rim (excluding Japan), 1990-2000

Value ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	13.2	18.7	32.1	51.7	51.4	54.9	79.0	82.0	76.3	43.8	11.7
Computer Integrated Manufacturing	5.0	5.6	11.0	15.1	21.1	9.9	7.7	14.6	11.6	11.1	13.5
Aerospace	5.2	0.5	1.2	2.0	1.9	1.5	2.5	2.3	1.2	0.8	1.9
Electronics	0.7	0.6	1.0	1.0	-2.4	2.1	4.3	1.0	1.4	3.1	2.8
Material Design	0.1	2.2	0.0	0.5	-3.3	0.3	0.1	0.0	0.1	0.0	0.0
Life Sciences	0.8	1.3	2.6	3.5	4.3	3.0	2.3	2.3	2.0	2.2	1.4
Opto-Electronics	0.9	1.0	2.3	1.4	-0.5	1.0	1.7	1.3	1.2	1.6	3.0
Weapons and Nuclear	0.1	0.3	0.6	0.2	0.2	0.3	0.3	0.2	0.1	0.3	0.3
Biotechnology	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.2
Total	**26.0**	**30.3**	**50.7**	**75.7**	**72.2**	**73.0**	**98.0**	**103.7**	**93.9**	**62.9**	**34.8**

% change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	41.7	71.5	61.1	-0.6	6.8	43.9	3.8	-6.9	-42.6	-73.2
Computer Integrated Manufacturing	13.4	95.0	38.2	39.5	-53.3	-21.6	89.4	-20.5	-4.5	21.7
Aerospace	-89.7	114.7	76.1	-6.5	-18.7	59.3	-7.3	-48.9	-28.8	124.4
Electronics	-17.2	71.6	1.7	-334.3	-187.3	103.6	-76.6	44.9	111.6	-8.6
Material Design	1678.2	-99.9	21685.9	-704.5	-107.8	-50.2	-96.7	1571.8	-100.0	-
Life Sciences	67.8	106.3	33.9	21.6	-30.5	-23.0	-0.9	-11.6	7.5	-37.5
Opto-Electronics	9.7	118.7	-37.7	-133.8	-311.4	72.1	-23.3	-11.4	36.4	88.2
Weapons and Nuclear	198.2	95.4	-59.4	-8.5	32.3	15.2	-47.2	-63.4	352.3	16.7
Biotechnology	654.2	154.5	100.5	15.4	-43.7	143.9	-100.0	-	-	1906.3
Total	**16.7**	**67.3**	**49.3**	**-4.6**	**1.1**	**34.4**	**5.7**	**-9.4**	**-33.0**	**-44.6**

Source: BC STATS and Statistics Canada

Detailed Table 36. Imports of High Technology Goods from the Pacific Rim (excluding Japan), by Commodity Group, 1990-2000

Values ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	145.2	168.1	204.5	239.8	301.3	327.1	90.5	101.5	101.8	135.1	196.4
Computer Integrated Manufacturing	-76.0	-86.6	-101.7	-102.0	-111.6	-112.5	6.4	7.9	10.6	10.2	13.8
Aerospace	1.1	1.9	0.8	1.6	1.6	1.7	2.3	2.3	3.2	3.8	18.3
Electronics	8.7	9.2	13.0	21.9	32.6	51.6	10.3	13.8	14.8	16.0	18.8
Material Design	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.2	0.8	2.3
Life Sciences	7.2	7.4	8.2	8.2	19.5	22.9	29.0	18.8	17.1	27.2	22.5
Opto-Electronics	0.7	0.7	1.1	1.6	1.8	2.2	1.9	3.7	4.4	4.2	8.1
Weapons and Nuclear	4.3	1.4	2.6	2.5	2.7	4.4	6.1	5.3	6.4	7.2	6.7
Biotechnology	0.2	0.0	0.1	0.1	0.1	0.2	0.1	0.1	1.4	2.2	3.0
Total	**91.4**	**102.0**	**128.5**	**173.8**	**248.0**	**297.8**	**146.7**	**153.4**	**159.8**	**206.6**	**289.8**

% change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	15.8	21.6	17.3	25.6	8.6	-72.3	12.2	0.3	32.7	45.4
Computer Integrated Manufacturing	13.9	17.4	0.3	9.5	0.8	-105.7	22.0	35.1	-4.3	35.2
Aerospace	71.4	-58.6	110.1	-4.2	10.9	29.4	1.0	41.0	17.8	385.7
Electronics	5.3	42.3	68.1	48.7	58.6	-80.0	34.0	7.2	8.0	17.5
Material Design	-35.6	-39.3	39.3	65.3	106.7	56.8	-70.0	236.3	317.2	184.0
Life Sciences	1.7	10.9	0.7	137.9	17.2	26.7	-35.1	-9.2	59.4	-17.3
Opto-Electronics	0.8	68.9	38.7	15.9	21.1	-14.3	98.6	16.9	-4.8	95.6
Weapons and Nuclear	-67.3	85.3	-1.9	7.7	62.2	36.5	-13.4	21.6	12.6	-6.9
Biotechnology	-74.5	21.9	77.0	-14.1	130.3	-67.0	127.8	903.7	58.5	36.6
Total	**11.7**	**25.9**	**35.3**	**42.7**	**20.1**	**-50.8**	**4.6**	**4.2**	**29.3**	**40.3**

Source: BC STATS and Statistics Canada

Detailed Table 37. Balance of Trade in High Technology Goods with the Pacific Rim (excluding Japan), by Commodity Group, 1990-2000

Balance ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	-132.0	-149.4	-172.4	-188.1	-249.9	-272.2	-11.5	-19.5	-25.4	-91.2	-184.6
Computer Integrated Manufacturing	81.0	92.2	112.7	117.1	132.8	122.3	1.3	6.8	1.0	0.9	-0.2
Aerospace	4.1	-1.3	0.4	0.4	0.3	-0.2	0.2	0.0	-2.0	-2.9	-16.5
Electronics	-8.0	-8.6	-12.0	-20.9	-35.0	-49.5	-6.0	-12.8	-13.4	-12.9	-16.0
Material Design	0.1	2.2	0.0	0.5	-3.4	0.1	-0.1	-0.1	-0.1	-0.8	-2.3
Life Sciences	-6.5	-6.1	-5.5	-4.7	-15.2	-19.9	-26.7	-16.5	-15.1	-25.1	-21.2
Opto-Electronics	0.3	0.4	1.1	-0.2	-2.3	-1.2	-0.1	-2.4	-3.2	-2.6	-5.1
Weapons and Nuclear	-4.2	-1.1	-2.0	-2.3	-2.5	-4.2	-5.7	-5.1	-6.3	-6.9	-6.4
Biotechnology	-0.2	0.0	0.0	0.0	0.0	-0.1	0.1	-0.1	-1.4	-2.2	-2.8
Total	**-65.4**	**-71.7**	**-77.8**	**-98.2**	**-175.8**	**-224.9**	**-48.6**	**-49.8**	**-65.9**	**-143.7**	**-255.0**

Source: BC STATS and Statistics Canada

Detailed Table 38. Exports of High Technology Goods to the European Union, by Commodity Group, 1990-2000

Values ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	12.5	12.4	13.0	15.5	23.7	21.7	10.8	17.5	12.7	8.3	7.0
Computer Integrated Manufacturing	2.3	3.5	6.7	4.0	4.7	6.2	5.2	5.5	6.3	5.7	5.6
Aerospace	23.7	2.2	1.2	8.6	1.2	2.8	2.7	1.4	3.1	3.7	15.9
Electronics	0.1	0.1	0.6	0.7	2.0	1.5	1.4	0.8	2.1	5.5	2.1
Material Design	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2
Life Sciences	2.4	2.1	2.2	1.9	1.6	2.2	1.7	2.0	4.6	4.9	4.0
Opto-Electronics	1.6	1.2	1.0	2.5	2.1	3.1	2.0	5.4	7.0	8.4	17.3
Weapons and Nuclear	0.1	0.1	0.1	0.3	0.1	0.9	0.3	0.0	0.3	1.0	2.5
Biotechnology	0.0	0.0	0.0	0.1	0.1	1.0	0.0	0.1	0.3	0.0	0.0
Total	**42.9**	**21.7**	**24.9**	**33.5**	**35.6**	**39.4**	**24.2**	**32.5**	**36.4**	**37.5**	**54.8**

% change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	-0.4	4.7	19.4	52.6	-8.6	-49.9	60.9	-27.3	-34.5	-15.4
Computer Integrated Manufacturing	51.6	92.5	-40.9	17.6	33.4	-17.1	5.6	16.1	-10.4	-1.4
Aerospace	-90.7	-43.6	589.9	-85.7	128.1	-3.7	-49.2	128.6	17.2	334.4
Electronics	12.9	384.3	0.9	209.0	-25.0	-6.9	-45.6	173.7	161.5	-61.0
Material Design	-98.6	306.8	-23.1	2084.4	-100.0	-	-100.0	-	-	1364.7
Life Sciences	-13.3	4.8	-10.6	-19.4	37.8	-19.6	15.6	129.1	6.5	-18.4
Opto-Electronics	-28.1	-14.9	146.4	-13.3	46.9	-34.7	162.1	31.7	19.3	105.5
Weapons and Nuclear	80.2	-32.3	192.6	-80.9	1671.1	-68.3	-93.2	1165.9	284.7	158.8
Biotechnology	166.2	-60.0	311.0	20.3	1005.0	-98.4	228.9	440.3	-85.1	-100.0
Total	**-49.4**	**14.8**	**34.5**	**6.2**	**10.7**	**-38.6**	**34.1**	**12.2**	**2.9**	**46.1**

Source: BC STATS and Statistics Canada

Detailed Table 39. Imports of High Technology Goods from the European Union, 1990-2000

Values ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	31.3	35.7	42.8	47.4	58.3	63.8	29.1	33.6	31.5	50.3	77.1
Computer Integrated Manufacturing	24.2	21.8	21.7	26.1	31.8	56.7	40.1	47.3	46.4	48.7	54.1
Aerospace	72.2	115.0	122.8	67.7	51.0	88.4	110.6	290.2	235.2	298.5	236.3
Electronics	6.2	10.0	6.6	8.2	20.1	23.0	6.3	6.3	8.5	11.1	16.4
Material Design	0.2	0.5	0.3	0.6	0.4	0.7	1.0	0.9	1.9	2.3	8.9
Life Sciences	59.5	69.5	83.3	110.4	130.3	188.0	178.2	176.3	189.2	215.5	256.8
Opto-Electronics	1.8	1.3	1.2	1.6	2.6	2.3	2.3	3.5	3.0	3.7	6.8
Weapons and Nuclear	5.2	3.8	4.5	4.1	8.6	6.9	7.7	9.0	10.7	10.5	13.3
Biotechnology	2.1	2.1	3.1	3.5	4.8	5.4	6.6	9.4	14.5	10.7	13.2
Total	**202.8**	**259.7**	**286.3**	**269.6**	**307.9**	**435.1**	**381.9**	**576.6**	**541.0**	**651.3**	**683.0**

Year-Over-Year Growth **% change from previous year**

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	13.9	20.0	10.6	23.0	9.4	-54.4	15.8	-6.4	59.7	53.3
Computer Integrated Manufacturing	-9.9	-0.6	20.6	21.6	78.5	-29.3	17.9	-1.7	4.8	11.2
Aerospace	59.3	6.8	-44.9	-24.6	73.3	25.2	162.3	-18.9	26.9	-20.8
Electronics	62.2	-34.1	24.8	144.3	14.2	-72.6	0.8	33.7	31.6	47.5
Material Design	144.4	-39.0	84.5	-34.9	86.9	35.1	-5.3	105.3	18.7	294.4
Life Sciences	16.8	19.8	32.5	18.0	44.2	-5.2	-1.1	7.3	13.9	19.2
Opto-Electronics	-28.1	-11.3	39.2	59.4	-10.7	-0.1	52.1	-15.9	26.1	83.4
Weapons and Nuclear	-27.7	19.4	-9.6	111.3	-20.0	12.0	17.0	18.6	-2.3	27.0
Biotechnology	0.4	50.3	12.3	38.0	11.6	22.7	41.9	55.5	-26.1	22.5
Total	**28.1**	**10.2**	**-5.8**	**14.2**	**41.3**	**-12.2**	**51.0**	**-6.2**	**20.4**	**4.9**

Source: BC STATS and Statistics Canada

Detailed Table 40. Balance of Trade in High Technology Goods with the European Union, by Commodity Group, 1990-2000

Balance ($ million)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Computers and Telecommunications	-18.8	-23.3	-29.8	-31.8	-34.6	-42.1	-18.2	-16.2	-18.8	-42.0	-70.1
Computer Integrated Manufacturing	-21.9	-18.3	-14.9	-22.1	-27.1	-50.5	-34.9	-41.8	-40.1	-43.0	-48.5
Aerospace	-48.5	-112.8	-121.5	-59.1	-49.8	-85.6	-107.9	-288.9	-232.1	-294.8	-220.4
Electronics	-6.0	-9.9	-6.0	-7.6	-18.1	-21.5	-4.9	-5.6	-6.4	-5.7	-14.3
Material Design	-0.1	-0.5	-0.3	-0.6	-0.2	-0.7	-1.0	-0.9	-1.9	-2.2	-8.6
Life Sciences	-57.1	-67.5	-81.1	-108.5	-128.7	-185.8	-176.5	-174.3	-184.6	-210.6	-252.8
Opto-Electronics	-0.2	-0.1	-0.2	0.8	-0.5	0.8	-0.3	1.8	4.1	4.7	10.4
Weapons and Nuclear	-5.2	-3.6	-4.4	-3.8	-8.6	-6.0	-7.4	-9.0	-10.5	-9.5	-10.8
Biotechnology	-2.0	-2.0	-3.1	-3.4	-4.7	-4.4	-6.6	-9.3	-14.3	-10.7	-13.2
Total	**-159.9**	**-238.0**	**-261.4**	**-236.1**	**-272.3**	**-395.6**	**-357.6**	**-544.1**	**-504.5**	**-613.8**	**-628.2**

Source: BC STATS and Statistics Canada

Detailed Table 41. Export of High Technology Services, 1991-1998 [1]

	Value ($ million)							
	1991	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
High Technology Service Exports								
Computer Services	35	78	163	163	208	208	237	456
Engineering Services	56	67	102	106	138	174	374	182
Total	**91**	**145**	**265**	**269**	**346**	**382**	**611**	**638**

	% change from previous year						
	1992	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
High Technology Service Exports							
Computer Services	120.3	109.0	0.0	27.6	0.0	13.9	92.4
Engineering Services	20.0	52.6	3.4	30.6	25.7	115.3	-51.5
Total	**58.9**	**82.9**	**1.3**	**28.8**	**10.3**	**60.1**	**4.3**

1. Based on surveyed firms only.

Source: Statistics Canada

7 Appendix A: Defining the High Technology Sector

How was the sector definition arrived at?

In 1995, BC STATS and the Science and Technology Division of the Ministry of Employment and Investment[1] developed a definition of the high technology sector that focuses on standard industries that produce high technology goods and services as their ultimate outputs. The definition looked at the high tech outputs of various standard industries (industries defined in the Canadian Standard Industrial Classification–SIC), their level of research activity, their representation in existing lists of high tech companies, and the opinions of an expert panel drawn from government, university, and the private sector.[2]

Using an approach that conforms to the industrial structure upon which Statistics Canada's data are compiled, it is possible to take advantage of the impressive array of data already collected by the national statistical agency and to create time series of data values.

Are all high tech companies included?

It is recognised that there are some drawbacks to the industry-based definition employed here. The first is that the Standard Industrial Classification system, developed in the late 1970s, does not fully recognise industries of the "new economy." As a result, new products and services are often grouped in an industry that primarily produces similar but distinctly different products and services.

Second, it is difficult to capture the full breadth of high technology or knowledge-intensive activity in the economy through SIC-based definitions. Innovation is not unique to a specific group of industries, but can be found throughout the whole economy. Some firms on the "leading edge" will be missed if they are classified in industries that, in aggregate, fail to show high tech characteristics. On the other hand, it is impossible to remove those firms in the industries in the sector that lag behind the industry norm.

The industries included in the definition adopted for this profile represent the core of the high technology sector. While it is certainly true that examples of creativity and innovation can be found in every industry, this definition, with its industry focus, includes only those industries where high technology activity is concentrated.

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[1] Now the Science, Technology and Telecommunications Division of the Ministry of Competition, Science and Enterprise.

[2] The complete methodology is presented in Lawrance and Miller, Defining the British Columbia High Technology/Knowledge Sector, 1996. This paper is available at http://www.bcstats.gov.bc.ca/data/bus_stat/hi_tech.htm

Exactly which industries are included?

The table below lists the industries that are defined, for the purpose of this report, to constitute the high technology sector. Where the weight column indicates a "✓", 100% of the industry is included in the high technology sector. Where numbers are given, they indicate the percentage of the industry that meets the definition of high technology.

Industries[1] in the High Technology Sector

SIC [2]	Industry	Sector	Weight
3211	Aircraft and Aircraft Parts Industry	Manufacturing	✓
3351	Telecommunications Equipment Industry	Manufacturing	✓
3352	Electronic Parts and Components	Manufacturing	✓
3359	Other Communication and Electronic Equipment	Manufacturing	✓
3361	Electronic Computing and Peripheral Equipment	Manufacturing	✓
3362	Electronic Office, Store and Business Machines	Manufacturing	✓
3369	Other Office, Stores and Business Machines	Manufacturing	✓
3372	Electrical Switchgear and Protective Equipment	Manufacturing	✓
3379	Other Electrical Industrial Equipment Industries	Manufacturing	✓
3741	Pharmaceutical and Medicine Industries	Manufacturing	✓
3911	Indicating, Recording and Controlling Instruments	Manufacturing	✓
3912	Other Instruments and Related Products	Manufacturing	✓
772	Computer and Related Services	Services	✓
7752	Offices Of Engineers	Services	✓
7759	Other Scientific and Technical Services	Services	✓
868	Health and Other Medical Laboratories	Services	✓
3192	Construction, Mining Machinery and Materials Handling	Manufacturing	13
3194	Turbine and Mechanical Power Transmission Equipment	Manufacturing	6
3199	Other Machinery and Equipment Industries N.E.C.	Manufacturing	3
3271	Shipbuilding and Repair Industry	Manufacturing	11
3381	Communications and Energy Wire and Cable Industry	Manufacturing	41
3711	Industrial Inorganic Chemical Industries N.E.C.	Manufacturing	10
3994	Musical Instrument and Sound Recording	Manufacturing	11
3999	Other Manufactured Products Industries	Manufacturing	6

Note:

For the purposes of this report, SIC industries 3741 and 3711 are grouped together as "37grp", and 3271, 3381, and 3994 combine to form "3grp".

It is felt that this definition is but a starting point. The introduction of the North American Industry Classification System (NAICS) over the next couple of years will give BC STATS the opportunity to revisit the definition, and refine it to better reflect the nature of the high technology sector in BC.

8 Appendix B: Defining High Technology Commodities

Exports and imports

In this report, trade in high technology goods refers to high technology commodities produced by the 20 manufacturing industries included in the high technology definition. While it is possible for an industry outside the sector to produce and export a particular commodity, this is generally not the case. Almost all exports of high tech goods originate from the 20 high tech manufacturing industries. In 1994, only 1% of high technology goods exports were produced by industries not included in the definition.

The imports tables are based on the same group of commodities. An estimate of BC destination imports was derived using the consumption of imports of those commodities by the BC economy.

Data for trade in goods are supplied by Statistics Canada and are provided through the Trade Research and Inquiry Package (TRIP) computer reporting system at BC STATS. TRIP offers user-defined tabulations of export or import statistics for BC, Canada, the United States and other countries. Tabulations can include information on commodities, countries, US states, years, months, mode of transport, etc.

Defining high technology commodities

The U.S. Bureau of the Census' advanced technology products (ATP) list[1] was used to identify high tech commodities in British Columbia's exports and imports. The ATP list of 223, six-digit, HS commodity codes was matched against BC's commodity exports for each of the years 1988 through 1994.[2] This process identified the set of high technology commodities exported each year from British Columbia.

To determine the industry source of these exports, the exported high technology commodities were matched against a concordance that linked commodities to industries. For instance, the concordance assigned exports of aircraft parts to SIC 3211, the Aircraft and Aircraft Parts Industry. Exports assigned to industries not included in the high technology definition were ignored. However, as mentioned earlier, these represent only about 1% of total high technology commodity exports.

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[1]See McGuckin, Robert H., Thomas A. Abbott, Paul Herrick, and Leroy Norfolk. 1991. *Measuring Advanced-Technology Products Trade: A New Approach.* US Bureau of the Census, for a discussion of the development and content of this list.

[2]Trade data for British Columbia are supplied by Statistics Canada and are available from the Trade Research and Inquiry Package (TRIP) computer reporting system at BC STATS.

Unlike data reported for shipments, employment etc., export data are not adjusted by production weights for the eight weighted industries. This is because the ATP list provides a more accurate measure of the high technology component of exports than would production weights applied to total exports. Similarly, export figures for the 16 unweighted industries do not represent total exports for those industries; but, rather, that portion of their exports that is identified as high technology.

Commodity groups

The U.S. Bureau of the Census has defined ten fields involving advanced or high technology commodities. Each field represents a large number of products and processes that are considered to be on the leading edge. These fields have been used to classify exports in this report.

Biotechnology

Biotechnology covers recent developments in recombinant deoxyribonucleic acid (DNA) research and genetic engineering. Obvious examples include drugs, enzymes, and other therapeutic items. Common applications include agricultural production, and the use of microorganisms for the production of drugs and other complex molecules.

Life Sciences (Medical)

This field encompasses the application of scientific advances to medical sciences. Recent advances such as nuclear resonance imaging, echocardio-graphs, and total-patient monitoring systems are examples of products developed from recent technological advances in this field. Also, recent increases in the strength of materials and reductions in their weight have led to improved internally implemented fixation devices and prostheses.

Opto-Electronics

Opto-electronics is generally defined as the expanded development and application of the laser. Also included are recent advances in photoelectric cells and diodes, photographic and other imaging equipment, and fiber-optic cables.

Computer and Telecommunications

This field covers technological advances affecting both computers and telecommunications hardware products. The primary advances in this field are in developing hardware that can process information more quickly. Important breakthroughs are expected in the areas of artificial intelligence and parallel processing.

Electronics

The miniaturisation of electronic components is the most important recent technological advance in the field of electronics. Some technologies included are integrated circuits, semiconductors, such as transistors and diodes, as well as new developments in

surface mounting of electronic components such as capacitors and resistors.

Computer Integrated Manufacturing

This field includes developments in robotics and numerically controlled (NC) machines. These products have a significant impact on industrial automation. Robots and NC machines perform increasingly sophisticated operations through developments in sensory and visual capabilities of machines. With these breakthroughs, the manufacturing processes have increased in flexibility and require less human intervention to operate and maintain production machinery. Many of the new automation technologies are made possible because of breakthroughs in the application and development of faster smaller components.

Materials Design

Materials design includes the newest methods of production for products that already exist in the market as well as the development of new products. Recent examples of technological advancements include high temperature superconductors, advanced polymers that expand the areas of plastic use, and new ultra clear glass that allows fibre optic cable to be used for long distance communication.

Aerospace

Technological developments in this field include advances that allow planes to fly further, faster, and higher, to use less fuel, and to have quieter engines. Many of the advances have been adapted to military applications, such as vertical take-off aircraft and aircraft that require shorter distances for takeoff and landings.

Weapons

This field covers all advanced methods used for the development, guidance, and control of weapons intended for national or personal protection and deterrence. Many of the developments in this area are the result of breakthroughs in computers and telecommunications as well as aerospace technologies.

Nuclear Technology

This field covers developments in nuclear power production and primary nuclear reactors. It includes newly designed reactor components that improve the safety and efficiency of nuclear power plants. It also includes developments in the creation and packaging of nuclear fuel, the application of atomic physics to medical, and other areas of science.

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